copy 2

...SITY OF MICHIGAN
...EDICAL LIBRARY

The Journal

of the Michigan State Medical Society

...ume 51 | October, 1952 | Number 10

Diabetes Number

"—but one life to give for his country."

SIR FREDERICK BANTING

(See Page 1342)

toward a fuller life for epileptics

DILANTIN

DILANTIN Sodium (diphenylhydantoin sodium, Parke-Davis)
is supplied in Kapseals® of 0.03 Gm. (½ gr.) and
0.1 Gm. (1½ gr.) in bottles of 100 and 1000.

THE JOURNAL
of the Michigan State Medical Society

VOLUME 51 OCTOBER, 1952 NUMBER 10

Contributors to This Issue

PAUL DE KRUIF

WM. M. LE FEVRE, M.D.

BRUCE C. LOCKWOOD, M.D.

Table of Contents

How Can We Have Better Medicine?
Paul de Kruif 1289

Milestones in Our Knowledge of Diabetes Mellitus.
Bruce C. Lockwood, M.D. 1295

Comparison of Diabetic Control with NPH and Globin Insulin.
Joseph T. Beardwood, Jr., M.D., C. Robert Tittle, M.D., and *Robert M. Packer, Jr., M.D.* 1298

Diabetes Starting in Childhood.
William M. LeFevre, M.D. 1303

Diabetes Detection.
George C. Thosteson, M.D. 1306

The Implications of Diabetes Mellitus Complicated by Pregnancy.
James B. Hurd, M.S., M.D. 1309

Breast Carcinoma Study: Relation to Thyroid Disease and Diabetes.
R. Winston Repert, M.D. 1315

The Family Doctor and Diabetes.
E. A. Bicknell, M.D. 1317

Fracture of the Maxilla.
Claire L. Straith, M.D., and *Richard E. Straith, M.D.* 1319

Abscesses of the Liver and Right Subdiaphragmatic Region.
Shattuck W. Hartwell, M.D., F.A.C.S. 1325

Notes on New Sex Offender Legislation.
Donald M. D. Thurber 1334

Early Detection of Cancer; Postgraduate Course 1336

President's Page:
We Serve 1337

Editorial:
Acknowledgment 1338
Diabetes in Michigan 1338
To a Better Life—Social Progress, not Socialism 1338
To a Better Life 1339
Michigan in Leadership 1340
Red Feather and Torch 1341
Are You Registered—Will you Vote??? 1341

Frederick Grant Banting, M.D.
William M. LeFevre, M.D. 1342

Diabetic Enjoys Normal Life Twenty-five Years 1343

Diabetes Retinitis 1343

Beaumont Memorial Restoration 1343

Michigan's Department of Health 1344

In Memoriam 1346

Correspondence 1348

News Medical 1352

The Doctor's Library 1364

You and Your Business 1256

Heart Beats 1268

Michigan's United Fund is Democracy in Action 1270

Michigan's Stake in Medical Education 1274

Medicine in Korea 1278

Editorial Comment 1280

Federal Medicine 1284

(Copyright, 1952, by Michigan State Medical Society)

THE JOURNAL
of the Michigan State Medical Society

VOLUME 51 OCTOBER, 1952 NUMBER 10

PUBLICATION COMMITTEE

C. A. PAUKSTIS, M.D., *Chairman*.....Ludington
F. H. DRUMMOND, M.D.....Kawkawlin
H. H. HISCOCK, M.D.....Flint
G. B. SALTONSTALL, M.D.....Charlevoix
G. W. SLAGLE, M.D.....Battle Creek

Office of Publication
2642 University Avenue
Saint Paul 14, Minnesota

Editor
WILFRID HAUGHEY, M.D.
610 Post Bldg., Battle Creek, Michigan

Secretary and Business Manager of THE JOURNAL
L. FERNALD FOSTER, M.D.
Thorne Bldg., 919 Washington Ave.
Bay City, Michigan

Executive Director
WM. J. BURNS, LL.B.
606 Townsend Street, Lansing 15, Michigan

All communications relative to exchanges, books for review, manuscripts, should be addressed to Wilfrid Haughey M.D., 610 Post Bldg., Battle Creek, Michigan.

All communications regarding advertising and subscription should be addressed to Wm. J. Burns, 2642 University Avenue, Saint Paul 4, Minnesota, or 606 Townsend Street, Lansing 15, Michigan. Telephone 57125.

Copyright, 1952, by Michigan State Medical Society

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 4, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $5.00; single copies, 50 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

PRINTED IN U.S.A.

OFFICERS OF THE SOCIETY
1952-1953

President.....R. J. HUBBELL, M.D.....Kalamazoo
President-Elect.....L. W. HULL, M.D.....Detroit
Secretary.....L. FERNALD FOSTER, M.D.....Bay City
Treasurer.....WM. A. HYLAND, M.D.....Grand Rapids
Speaker.....R. H. BAKER, M.D.....Pontiac
Vice Speaker.....J. E. LIVESAY, M.D.....Flint
Editor.....WILFRID HAUGHEY, M.D.....Battle Creek

THE COUNCIL

WILLIAM BROMME, M.D., Chairman, Detroit
H. B. ZEMMER, M.D., Vice Chairman, Lapeer
L. FERNALD FOSTER, M.D., Secretary, Bay City

	District		Term Expires
ARCH WALLS, M.D.	1st	Detroit	1956
R. S. BREAKEY, M.D.	2nd	Lansing	1955
G. W. SLAGLE, M.D.	3rd	Battle Creek	1955
RALPH W. SHOOK, M.D.	4th	Kalamazoo	1956
J. D. MILLER, M.D.	5th	Grand Rapids	1956
H. H. HISCOCK, M.D.	6th	Flint	1956
H. B. ZEMMER, M.D.	7th	Lapeer	1957
L. C. HARVIE, M.D.	8th	Saginaw	1957
G. B. SALTONSTALL, M.D.	9th	Charlevoix	1957
F. H. DRUMMOND, M.D.	10th	Kawkawlin	1957
C. A. PAUKSTIS, M.D.	11th	Ludington	1953
A. H. MILLER, M.D.	12th	Gladstone	1953
W. S. JONES, M.D.	13th	Menominee	1953
B. M. HARRIS, M.D.	14th	Ypsilanti	1954
D. BRUCE WILEY, M.D.	15th	Utica	1955
W. D. BARRETT, M.D.	16th	Detroit	1955
W. B. HARM, M.D.	17th	Detroit	1953
WILLIAM BROMME, M.D.	18th	Detroit	1954

R. J. HUBBELL, M.D.	President	Kalamazoo
L. W. HULL, M.D.	President-Elect	Detroit
R. H. BAKER, M.D.	Speaker	Pontiac
J. E. LIVESAY, M.D.	Vice Speaker	Flint
L. FERNALD FOSTER, M.D.	Secretary	Bay City
WM. A. HYLAND, M.D.	Treasurer	Grand Rapids
OTTO O. BECK, M.D.	Immediate Past President	Birmingham

EXECUTIVE COMMITTEE OF THE COUNCIL

WILLIAM BROMME, M.D.....Chairman
H. B. ZEMMER, M.D.....Vice Chairman
C. A. PAUKSTIS, M.D.....Chairman Publication Committee
W. S. JONES, M.D.....Chairman Finance Committee
D. BRUCE WILEY, M.D.....Chairman County Societies Committee
R. H. BAKER, M.D.....Speaker, House of Delegates
J. E. LIVESAY, M.D.....Vice Speaker, House of Delegates
R. J. HUBBELL, M.D.....President
L. W. HULL, M.D.....President-Elect
L. FERNALD FOSTER, M.D.....Secretary
WM. A. HYLAND, M.D.....Treasurer

SECTION OFFICERS

Medicine
D. R. Boyd, M.D.....Muskegon
Chairman
C. K. Stroup, M.D.....Flint
Secretary

Surgery
J. M. Wellman, M.D.....Lansing
Chairman
C. L. MacCallum, M.D.....Midland
Secretary

Gynecology and Obstetrics
J. P. Ottaway, M.D.....Detroit
Chairman
J. L. Gillard, M.D.....Muskegon
Secretary

Dermatology and Syphilology
M. G. Butler, M.D.....Saginaw
Chairman
C. J. Courville, M.D.....Detroit
Secretary

Gastroenterology and Proctology
R. L. Fitts, M.D.....Grand Rapids
Chairman
R. M. Burke, M.D.....Detroit
Secretary

Radiology, Pathology, Anesthesiology
W. A. Stryker, M.D.....Wyandotte
Chairman (Path.)
F. K. Wietersen, M.D.....Birmingham
Vice Chairman (Rad.)
E. D. Conner, M.D.....Detroit
Secretary (Anes.)

General Practice
C. J. Williams, M.D.....Grosse Pointe
Chairman
J. W. Rice, M.D.....Jackson
Secretary

Ophthalmology and Otolaryngology
L. L. Loder, M.D.....Muskegon
Chairman (Ophth.)
F. A. Lamberson, M.D.....Detroit
Co-Chairman (Oto.)
L. F. Carter, M.D.....Detroit
Secretary (Ophth.)
R. B. Fast, M.D.....Kalamazoo
Co-Secretary (Oto.)

Pediatrics
P. S. Bradshaw, M.D.....Muskegon
Chairman
H. B. Rothbart, M.D.....Detroit
Secretary

Urology
F. B. Bicknell, M.D.....Detroit
Chairman
B. W. Dovitz, M.D.....Detroit
Secretary

Public Health and Preventive Medicine
J. C. Molner, M.D.....Detroit
Chairman
C. A. Neafie, M.D.....Pontiac
Secretary

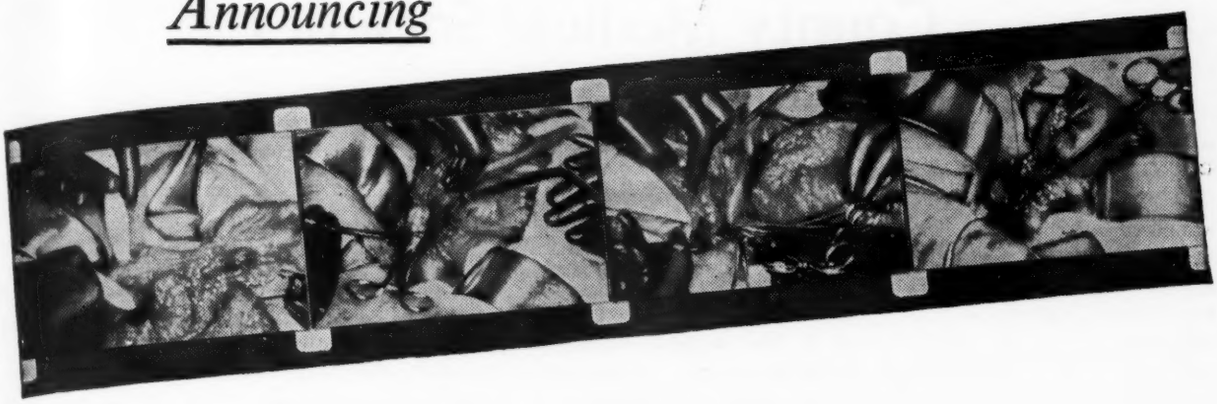
Nervous and Mental Diseases
T. V. Hoagland, M.D.....Detroit
Chairman
K. C. Nickel, M.D.....Grand Rapids
Secretary

DELEGATES TO A. M. A.

Delegates
W. D. Barrett, M.D., Detroit.....1952
W. H. Huron, M.D., Iron Mountain 1952
R. L. Novy, M.D., Detroit.....1952
R. A. Johnson, M.D., Detroit.....1953
W. A. Hyland, M.D., Grand Rapids 1953
J. S. DeTar, M.D., Milan.....1953

Alternates
R. H. Denham, M.D., Grand Rapids 1952
C. I. Owen, M.D., Detroit.....1952
E. F. Sladek, M.D., Traverse City 1953
E. D. Spalding, M.D., Detroit.....1953
W. W. Babcock, M.D., Detroit.....1953
E. C. Texter, M.D., Detroit.....1953

Announcing



A new film in full color

Special Problems in the Management

of

PEPTIC ULCER •

by

Department of Gastroenterology
of the Lahey Clinic

A Unit of the Wyeth Peptic Ulcer Service

- *FILMS*
- *LITERATURE*
- *MEDICATION*

Among the topics developed are: esophageal ulcer; gastric ulcer, benign and malignant; postbulbar ulcer and subtotal gastrectomy for intractable ulcer in the descending portion of the duodenum; pyloric obstruction; hemorrhage; postoperative jejunal or anastomotic ulcer. 16 mm., color with sound, 30 minutes. To obtain this film for group showing, write to:

FILM LIBRARY
WYETH INCORPORATED
1401 Walnut Street
Philadelphia 2, Pa.

Wyeth®

WYETH PEPTIC ULCER MEDICATION

Amphojel®, N.N.R. (Aluminum Hydroxide Gel, Alumina Gel)—For the medical management of gastric and duodenal ulcer; or for the control of symptomatic gastric hyperacidity.

Amphojel without Flavor, N.N.R.

Amphojel Tablets N.N.R. (Dried Aluminum Hydroxide Gel, Hydrated Alumina Tablets, 0.3 Gm. (5 grains); 0.6 Gm. (10 grains).

Phosphaljel®, N.N.R. (Aluminum Phosphate Gel)—for marginal ulcer.

County Medical Societies

Branches of the Michigan State Medical Society

COUNTY	PRESIDENT	SECRETARY
ALLEGAN	W. C. Medill, M.D., Plainwell	J. E. Mahan, M.D., Allegan
ALPENA-ALCONA-PRESQUE ISLE	W. F. Jackson, M.D., Rogers City	Harold Kessler, M.D., 404 N. Second, Alpena
BARRY	W. G. Logan, M.D., Hastings	W. R. Birk, M.D., Hastings
BAY-ARENAC-IOSCO	A. L. Ziliak, M.D., Bay City	L. Fernald Foster, M.D., 919 Washington Ave., Bay City
BERRIEN	R. C. Conybeare, M.D., Benton Harbor	W. J. Butler, M.D., 12 Peoples Bank Bldg., St. Joseph
BRANCH	H. R. Mooi, M.D., Coldwater	Henry Gomley, M.D., Bronson
CALHOUN	R. K. Curry, M.D., Homer	S. P. Barden, M.D., Leila Y. Post Hospital, Battle Creek
CASS	K. C. Pierce, M.D., Dowagiac	R. I. Clary, M.D., Dowagiac
CHIPPEWA-MACKINAC	E. S. Rhind, M.D., Sault Ste. Marie	T. B. Mackie, M.D., 300 Court Street, Sault Ste. Marie
CLINTON	E. M. Slagh, M.D., Elsie	Bruno Cook, M.D., Westphalia
DELTA-SCHOOLCRAFT	A. J. Carlton, M.D., Escanaba	N. L. Lindquist, M.D., 531 S. 14th Street, Escanaba
DICKINSON-IRON	W. H. Huron, M.D., Iron Mountain	E. T. Palm, M.D., 412 Superior Street, Crystal Falls
EATON	D. J. Carothers, M.D., Charlotte	A. H. Meinke, M.D., 702 S. Main Street, Eaton Rapids
GENESEE	W. W. Stevenson, M.D., Flint	E. P. Griffin, Jr., M.D., 619 Mott Found. Bldg., Flint
GOGEBIC	J. R. Franck, M.D., Wakefield	W. H. Wacek, M.D., P. O. Box 680, Ironwood
GRAND TRAVERSE-LEELANAU-BENZIE	R. T. Lossman, M.D., Traverse City	D. G. Pike, M.D., 876 E. Front Street, Traverse City
GRATIOT-ISABELLA-CLARE	L. L. Davis, M.D., Mt. Pleasant	C. H. Wallman, M.D., R. B. Smith Mem. Hosp., Alma
HILLSDALE	Ira Wiggins, M.D., Jonesville	A. J. Stein, M.D., 96 West Street, Hillsdale
HOUGHTON-BARAGA-KEWEENAW	F. E. Kolb, M.D., Calumet	V. E. Lepisto, M.D., 102 S. Iroquois, Laurium
HURON	A. W. Weiss, M.D., Bad Axe	P. R. Turner, M.D., Harbor Beach
INGHAM	R. J. Himmelberger, M.D., Lansing	J. L. Isbister, M.D., Mich. Dept. Health, Lansing
IONIA-MONTCALM	H. E. Reid, M.D., Stanton	R. E. Rice, M.D., Greenville
JACKSON	W. A. Wickham, M.D., Jackson	H. W. Porter, M.D., 505 Wildwood Avenue, Jackson
KALAMAZOO	J. R. MacGregor, M.D., Parchment	C. M. Schrier, M.D., Box "A" State Hosp., Kalamazoo
KENT	J. D. Miller, M.D., Grand Rapids	H. G. Benjamin, M.D., 514 Med. Arts Bldg., Grand Rapids
LAPEER	J. R. Doty, M.D., Lapeer	Robert A. Biggs, M.D., North Branch
LENAWEE	R. V. Tubbs, M.D., Blissfield	J. D. Hamilton, M.D., Toledo Street, Adrian
LIVINGSTON	H. L. Sigler, M.D., Howell	R. M. Duffy, M.D., Pinckney
LUCE	E. H. Campbell, M.D., Newberry	W. R. Purmort, M.D., Newberry
MACOMB	C. A. Ruedisueli, M.D., Roseville	J. H. Jewell, M.D., 29 Lincoln Street, Mt. Clemens
MANISTEE	R. E. Rowe, M.D., Manistee	Samuel Osborn, M.D., Manistee
MARQUETTE-ALGER	A. L. Amolsch, M.D., Marquette	A. S. Narotzky, M.D., Odd Fellows Building, Ishpeming
MASON	J. R. Carney, M.D., Ludington	A. F. Boon, M.D., W. Ludington Street, Ludington
MECOSTA-OSCEOLA-LAKE	Edward Van Auken, M.D., Big Rapids	J. A. White, M.D., 121 S. Michigan Ave., Big Rapids
MEDICAL SOCIETY OF NORTH CENTRAL COUNTIES	H. M. Jardine, M.D., West Branch	B. E. Henig, M.D., 308 Michigan Avenue, Grayling
MENOMINEE	L. G. Glickman, M.D., Menominee	W. S. Jones, Jr., M.D., 1146 Tenth Ave., Menominee
MIDLAND	W. H. Gronemeyer, M.D., Midland	R. T. Blackhurst, M.D., Arcade Bldg., Midland
MONROE	L. C. Blakey, M.D., Monroe	E. J. Sanger, M.D., 3 East Front Street, Monroe
MUSKEGON	P. S. Bradshaw, M.D., Muskegon	W. M. LeFevre, M.D., 289 W. Western Ave., Muskegon
NEWAYGO	D. W. Harris, M.D., Fremont	B. L. Masters, M.D., 43 W. Main, Fremont
NORTHERN MICHIGAN	A. J. Hegener, M.D., Petoskey	Gerald Drake, M.D., Petoskey
OAKLAND	H. A. Furlong, M.D., Pontiac	A. R. Young, M.D., 906 Riker Building, Pontiac
OCEANA	W. G. Robinson, M.D., Hart	C. H. Flint, M.D., 315 State Street, Hart
ONTONAGON	C. R. Lahti, M.D., Ontonagon	W. F. Strong, M.D., Ontonagon
OTTAWA	C. S. Cook, M.D., Holland	F. W. DeYoung, M.D., Spring Lake
SAGINAW	F. E. Luger, M.D., Saginaw	Robert Bucklin, M.D., 1447 N. Harrison, Saginaw
SANILAC	Frances Ford, M.D., Applegate	E. W. Blanchard, M.D., Deckerville
SHIAWASSEE	W. F. Weinkauf, M.D., Corunna	R. C. Brown, M.D., 113 E. Williams Street, Owosso
ST. CLAIR	F. E. Ludwig, M.D., Port Huron	T. H. Bottomley, M.D., 1102 Sixth Street, Port Huron
ST. JOSEPH	Eleanor M. Gillespie, M.D., Sturgis	J. P. Sheldon, M.D., 104 S. Clay Street, Sturgis
TUSCOLA	W. E. Pelczar, M.D., Unionville	H. L. Nigg, M.D., Caro
VAN BUREN	Carl Boothby, M.D., Hartford	T. J. Dillon, M.D., 221 Oak St., Paw Paw
WASHTENAW	B. M. Harris, M.D., Ypsilanti	L. Dell Henry, M.D., 118 N. State Street, Ann Arbor
WAYNE	E. D. Spalding, M.D., Detroit	J. B. Blodgett, M.D., 4421 Woodward Avenue, Detroit
WEXFORD-MISSAUKEE	P. H. Paye, M.D., Cadillac	G. C. Tornberg, M.D., Cadillac

Salient facts on the new antituberculous drug...

NYDRAZID

Squibb Isoniazid

	what is known	*what is not known*
Antituberculous effect	Nydrazid has greater potency against the tubercle bacillus than any other known compound, both in vitro and in experimental animals. Clinical results are encouraging. The effect on fever and general status is often dramatic. Roentgenographic improvement occurs often, but is generally slower than in patients treated with streptomycin.	It is too early to predict what the long-term effect of Nydrazid will be. Presumably chronic lesions will not respond better than they do to streptomycin, except insofar as Nydrazid penetrates better. Nydrazid and streptomycin appear to have additive effect in vitro, but it is not known how effective such a combination will be in clinical practice.
Bacterial resistance	Tubercle bacilli with increased resistance to Nydrazid have been isolated from patients. Resistant organisms can also be cultured in vitro, but this phenomenon is virtually eliminated when cultures are exposed to streptomycin and Nydrazid simultaneously.	The clinical implications of bacterial resistance are not completely known. Patients harboring resistant organisms may continue to improve under treatment. The question of delaying the emergence of resistant bacilli by combined therapy must await further study.
Toxicity	Toxic reactions to Nydrazid are chiefly due to stimulation of the central nervous system. They are negligible in the therapeutic dose range, except in patients with convulsive tendencies.	It appears probable that central nervous reactions to Nydrazid can be controlled by barbiturates. But with continued use of the drug, it is not known what sensitivity reactions may occur.

Nydrazid is supplied in 50 and 100 mg. scored tablets, bottles of 100 and 1000.

For further information on Nydrazid send for the Nydrazid Abstract Folder.

SQUIBB

"NYDRAZID" IS A TRADEMARK OF E. R. SQUIBB & SONS

E. R. SQUIBB & SONS
745 Fifth Avenue
New York 22, N. Y.

Please send me a copy of the Nydrazid Abstract Folder.

NAME_____

ADDRESS_____

CITY_____ STATE_____

Dept. B

You and Your Business

INTERNAL REVENUE RULES M.D.S MAY DEDUCT PAYMENTS FOR PROFESSIONAL ASSISTANCE

U. S. Bureau of Internal Revenue has ruled that physicians may deduct from their taxable income the payments they make for "professional assistance" in conducting their practice. Such deductions may be made, the Bureau states in its Bulletin of September 1, 1952, as an ordinary and necessary expense of carrying on a trade or business. The Bureau did not define "professional assistance."

On the question of payments made by a physician, on a split fee basis, to another physician who refers patients to him, the Bureau states that such payments as deductible business expense must be determined "in the light of all the circumstances in each case." It adds:

"However, as a general rule, such payments are deductible for Federal income tax purposes provided they are normal, usual, and customary in the profession and in the community; are appropriate and helpful in obtaining business; and do not frustrate sharply defined national or state policies evidenced by a governmental declaration proscribing particular types of conduct."

A Bureau spokesman explained that the decision sets forth the pattern the Bureau is to follow in the future when ruling on such cases. The ruling cited the U. S. Supreme Court decision in the Thomas B. Lilly case which permitted tax deductions of rebates paid by an optical company to physicians prescribing eyeglasses sold by the firm. The Bureau Bulletin (No. 18) is available at Government Printing Office, Washington 25, D. C., at 15 cents a copy.

MICHIGAN CLINICAL INSTITUTE

March 11-12-13, 1953

The "block system"—so successful at the 1952 MCI—will be continued at the Institute in Detroit next March.

Wednesday morning "block" subjects will cover *Surgery.*

Wednesday afternoon's topics will be devoted to *Obstetrics, Gynecology* and *Pediatrics.*

Cancer Control will be the subject of four lectures on Thursday morning, March 12.

Surgery of Trauma will be featured on Thursday afternoon.

Friday, March 13, will feature *Heart and Rheumatic Fever* in the morning.

Internal Medicine will be the topic of subjects featured Friday afternoon, March 13.

Among the speakers who already have accepted invitations to appear on the 1953 Michigan Clinical Institute program are:

H. W. Dargeon, M.D., New York City; R. S. Dinsmore, M.D., Cleveland; J. R. Driver, M.D., Cleveland; M. H. Griswold, M.D., Hartford, Conn.; R. W. Houde, M.D., New York City; H. B. Houser, M.C., Warren Air Force Base, Wyoming; E. M. Kline, M.D., Cleveland; W. B. Kountz, M.D., St. Louis, Mo.; D. J. Barnes, M.D., Detroit; G. S. Bates, M.D., Detroit; L. E. Bauer, M.D., Detroit; A. I. Braudo, M.D., Ann Arbor; W. N. Davey, M.D., Ann Arbor; F. D. Dodrill, M.D., Detroit; R. A. Gerisch, M.D., Detroit; H. K. Hellems, M.D., Detroit; W. S. Reveno, M.D., Detroit; and C. N. Swanson, M.D., Detroit.

The complete program of the 1953 MCI will be published in the December, 1952, number, JMSMS.

J. Milton Robb, M.D., of Detroit, is General Chairman of Arrangements for the 1953 Institute.

SOCIALIZED MEDICINE THROUGH THE BACK DOOR

The last ILO Conference, held in June, 1952, gives evidence that the drive for socialized medicine has shifted from the domestic scene to the international scene—that it may walk through a back door under the guise of an international treaty.

ILO means International Labor Organization, an affiliated agency of the United Nations.

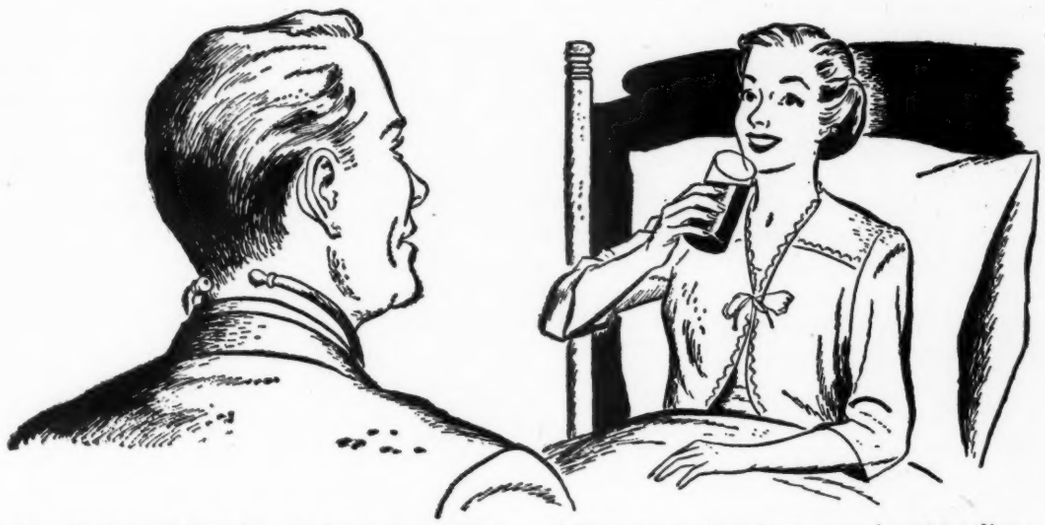
Ratification of the ILO's newest Convention (Treaty) on Minimum Standards of Social Security by a two-thirds vote by only the Senate would establish "socialized medicine" irrespective of the wishes of the majority of the members of Congress and the public to the contrary. The medical care section of the convention stipulates in part that a country ratifying must provide a system of compulsory health insurance. Lacking this, it has two alternatives: (1) private, voluntary health insurance administered by public authorities under established regulation, or (2) private, voluntary health insurance administered by insurance companies under government supervision.

The same forces which unsuccessfully attempted to socialize the medical profession through legislation in our State Legislature and in the Federal Congress are finding it much easier to work through the United Nations and the ILO. Through the wholesale approval of treaties, convention, and executive agreements, our international representatives have placed not only American medicine but

(Continued on Page 1258)

WHEN DRUG THERAPY

Increases Nutrient Requirements



The administration of many drugs can sharply increase the patient's requirements for various essential nutrients. The presence and action of certain drugs in the organism may alter normal utilization of nutrients to purposes of detoxication of these drugs.

In some instances, drugs may impair absorption of nutrients, increase their destruction within the digestive tract, interfere with their metabolism, or hasten their elimination. With prolonged administration, therefore, unless the intake of various nutrients is increased, deficiency states may be precipitated.

The dietary supplement Ovaltine in milk can significantly increase the nutrient intake of the patient when therapy makes this adjustment necessary. As shown by the table below, it provides substantial amounts of all nutrients known to be essential. Its excellent quality protein furnishes an abundance of all the indispensable amino acids.

Because of its delicious flavor, Ovaltine in milk is universally enjoyed by patients. It is easily digested, bland, and its nutrients are quickly available for utilization. The two varieties of Ovaltine, plain and chocolate flavored, both similar in high nutrient content, allow choice according to flavor preference. Children particularly like Chocolate Flavored Ovaltine.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.

Ovaltine

Three Servings of Ovaltine in Milk Recommended for Daily Use Provide the Following Amounts of Nutrients

(Each serving made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk)

MINERALS				VITAMINS			
*CALCIUM	1.12 Gm.	MAGNESIUM	120 mg.	*ASCORBIC ACID	37 mg.	PYRIDOXINE	0.6 mg.
CHLORINE	900 mg.	MANGANESE	0.4 mg.	BIOTIN	0.03 mg.	*RIBOFLAVIN	2.0 mg.
COBALT	0.006 mg.	*PHOSPHORUS	940 mg.	CHOLINE	200 mg.	*THIAMINE	1.2 mg.
*COPPER	0.7 mg.	POTASSIUM	1300 mg.	FOLIC ACID	0.05 mg.	*VITAMIN A	3200 I.U.
FLUORINE	3.0 mg.	SODIUM	560 mg.	*NIACIN	6.7 mg.	VITAMIN B_{12}	0.005 mg.
*IODINE	0.7 mg.	ZINC	2.6 mg.	PANTOTHENIC ACID	3.0 mg.	*VITAMIN D	420 I.U.
*IRON	12 mg.						

*PROTEIN (biologically complete)	32 Gm.
*CARBOHYDRATE	65 Gm.
*FAT	30 Gm.

*Nutrients for which daily dietary allowances are recommended by the National Research Council.

SOCIALIZED MEDICINE

(Continued from Page 1256)

our national sovereignty in our Constitution in jeopardy.

Doctor, get acquainted with the ILO, its history, purpose, and plans—and then wage the same vigorous campaign against socialism by treaty that you are now conducting against socialism made-in-America.

"Must" reading for every physician are the articles which have been appearing in JAMA on the ILO, such as the excellent editorial "Socialized Medicine—the ILO Way" which appears in the August 23 number of JAMA.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

August 13, 1952

- Sixty-one items were presented to the Executive Committee of The Council on August 13. Chief in importance were:
- Financial reports were presented, studied and approved. Bills payable were presented and payment was authorized.
- The Michigan State Board of Registration in Medicine advised that it had appointed a Liaison Committee to the Michigan State Medical Society composed of E. W. Schnoor, M.D., Grand Rapids; E. C. Swanson, M.D., Vassar, and O. D. Stryker, M.D., Mt. Clemens. (The MSMS representatives to the Liaison Committee with the State Board are: W. B. Harm, M.D., Detroit; L. Fernald Foster, M.D., Bay City; and W. S. Jones, M.D., Menominee).
  The State Board's letter also included copies of the Board's new Rules and Regulations applicable to the amendments made to the Medical Practice Act by the 1952 Legislature.
- Committee reports—the following were given consideration: (a) Committee to Survey Hospital Facilities at the State Prison of Southern Michigan at Jackson, meeting of July 15 (interim report); (b) Beaumont Memorial Working Committee, meeting of July 30; (c) Public Relations Committee, meeting of August 3; (d) Committee on Arbitration (re Uniform Fee Schedule for Governmental Agencies), meeting of August 8.
- Beaumont Memorial Restoration. The suggestions of President Otto O. Beck, M.D.: (a) to draw up a lease so that MSMS has sole control of the building during the period it is being restored as a monument or shrine to William Beaumont, M.D.; (b) that copies of the MSMS offer and the acceptance by the Mackinac Island State Park Commission be forwarded to the Governor and to the State Administrative Board for their files; (c) that a written understanding be made as to the place the MSMS will hold after it relinquishes the building and turns the completed project over to the State so that future Park Commissions may know and follow the terms of the agreement; (d) that full credit be given to Mr. W. F. Doyle, Chairman of the Park Commission, for the impetus he gave to the restoration movement and that his work be prominently presented in a history of the Beaumont Memorial Restoration for dissemination to the public and for preservation in the Memorial itself on Mackinac Island; and (e) that the Park Commission be requested to zone the area to protect the quality of the neighborhood in which the Beaumont Memorial is located.

  Dr. Beck also reported that contributions to the Beaumont Memorial to August 10, totaled $20,689.30, including gifts of 1,359 individual doctors of medicine with an average contribution of $11.60; to date 25.6 per cent of MSMS members have contributed.

  President Beck also announced that a special emblem or badge will be pinned on all doctors of medicine who have contributed to the Beaumont Memorial Fund when they register at the MSMS Annual Session in Detroit.
- Chairman William Bromme, M.D., appointed a Consultative Committee to the Beaumont Memorial Restoration: Otto O. Beck, M.D., Chairman, Birmingham; F. A. Coller, M.D., Ann Arbor; Prentiss M. Brown, St. Ignace; L. J. Hirschman, M.D., Traverse City; Professor Emil Lorch, Ann Arbor; H. J. Loynd, Detroit; and A. H. Whittaker, M.D., Detroit. The appointments were confirmed by the Executive Committee of The Council.
- President's Commission on Health Needs of the Nation, Regional Hearing in Detroit on September 23 under chairmanship of Walter Reuther, a member of the Commission. The Executive Committee of The Council instructed the Secretary to request the privilege of an oral presentation by an MSMS representative at this Regional Public Hearing in Detroit; it also requested C. E. Umphrey, M.D., Detroit, to coordinate the health and medical groups so that an adequate presentation is made at this hearing of September 23.
- Michigan Insurance Commissioner Joseph A. Navarre and Deputy Commissioner H. B. Thompson were present and discussed voluntary hospital and medical care programs.
- The monthly report of Rheumatic Fever Coordinator Leon DeVel, M.D., was presented and accepted.
- Requests of Medical Economics, the magazine, for statement re the future of prepaid medical care plans was referred for report to the MSMS representatives on Michigan Medical Service Board and also to the Liaison Committee with Michigan Medical Service.

(Continued on Page 1260)

PROVED in three years' clinical use

Cortone®

ACETATE

(CORTISONE ACETATE, MERCK)

Typical experience:

Administration of CORTONE,
systemically, reduced rheumatoid arthritis symptoms
in *all* of 100 patients treated.
Daily maintenance doses of 50 mg. or less, orally,
were adequate in 53 per cent of cases.

Ward, E., Slocumb, C. H., Polley, H. F., Lowman, E. W., and Hench, P. S.,
Proc. Staff Meet. Mayo Clin. **26**: 361, Sept. 26, 1951.

CORTONE is the registered
trade-mark of Merck & Co., Inc.
for its brand of cortisone.

MERCK & CO., INC.
Manufacturing Chemists
RAHWAY, NEW JERSEY
In Canada: MERCK & CO. Limited—Montreal

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1258)

- The MSMS County Secretaries Conference of 1953 was set for Lansing on Wednesday, February 25, 1953.
- Michigan Clinical Institute of 1953, Detroit. Discussion Conference Leaders were chosen: W. H. Huron, M.D., Iron Mountain, for March 11; F. A. Coller, M.D., Ann Arbor, for March 12; E. D. Spalding, M.D., Detroit, for March 13.

  A special meeting for residents, interns and senior medical students, during the 1953 MCI was authorized—the arrangement of one period of particular interest to these young men and women to be recommended to the Committee on Arrangements.
- (a) Report of S. E. Gould, M.D., Eloise, on Brucellosis Conference in St. Paul was accepted with thanks and referred to Editor Haughey for possible publication in JMSMS.
  (b) Report of A. H. Whittaker, M.D., Detroit, on President's Conference on Industrial Safety was received with thanks.
- Michigan Industrial Health Day was scheduled for Tuesday, March 10, 1953, at the Sheraton-Cadillac Hotel, Detroit, with a testimonial banquet in the evening to honor the President of the Industrial Medical Association, E. A. Irvin, M.D., Detroit.
- A. Hazen Price, M.D., was nominated to succeed himself on the State Advisory Committee for Practical Nurse Education, a committee of the Michigan Department of Public Instruction.
- The monthly report of the Public Relations Counsel included (a) information on a WWJ dramatic radio program to "Beaumont" scheduled during MSMS Annual Session in Detroit; (b) Annual Session luncheons, radio and TV speakers; (c) MSMS Public Relations Conference scheduled for Detroit, February 1, 1953—tentative program presented; (d) Plans for Exhibit at State Fair approved.
- Nominated to represent MSMS at the Michigan Welfare League convention in Detroit, November 10-12 were R. J. Hubbell, M.D., Kalamazoo; L. W. Hull, M.D., Detroit; O. D. Stryker, M.D., Mt. Clemens, and H. B. Zemmer, M.D., Lapeer.

MSMS PLACEMENT BUREAU—AT YOUR SERVICE

For those readers who may not be familiar with the Placement Service activities of the Michigan State Medical Society, we invite attention to the fact the State Medical Society maintains a listing of doctors of medicine seeking locations in which to practice, that is, interns and residents who are about to enter private practice, medical practitioners in larger cities who many times wish to locate in a smaller community, and M.D.s from other states who indicate a desire to transfer to Michigan.

Your State Medical Society also maintains a list of Michigan communities which have indicated a need for medical services, communities which have no doctor of medicine available at all, and some communities which need additional medical service.

This service operates by providing, upon request, a list of communities seeking medical service to those physicians who indicate a desire to locate in Michigan; and, supply a list of physicians desiring Michigan locations in those communities who may request same. Contact between the physician and the community is made directly by the interested parties.

Locum tenens: The MSMS office also receives requests for locum tenens and since it is felt that more requests might be secured and additional service rendered if such a department for placement activities were added, we would appreciate notification when a locum tenens physician is desired, also, advice as to doctors of medicine who may desire to perform locum tenens activities in order that we may be of assistance to both parties in satisfying their needs.

The Placement Bureau of the Michigan State Medical Society is at YOUR service to provide better medical care in Michigan.

CIO RETRACTION

A $50,000 libel suit commenced against the Wisconsin CIO publications office by the head of the Kohler Co. medical staff is being withdrawn. Dr. C. C. Gascoigne said Thursday he planned to ask for dismissal of the action following the August 8 publication of a retraction in the state edition of the *Wisconsin CIO News*. Dr. Gascoigne had charged that a news article in the May 9 issue was "deliberately, maliciously and falsely" designed to lead readers to understand that Kohler Co. doctors made an incorrect diagnosis of the condition of a plant employe. "Any implication that the Kohler Co. doctors made an incorrect diagnosis or advised or administered any incorrect treatment is without foundation and fact," the retraction notice stated.—*Milwaukee Sentinel*, August 15, 1952. Editorial, Industrial Medicine and Surgery, September, 1952.

MORE MEDICAL-SOCIAL DEVELOPMENTS REPORTED AT ILO HEADQUARTERS

Two more developments of some medical interest are reported from International Labor Organization's headquarters in Geneva. An ILO survey, with special reference to the chemical industry, concluded that American physicians generally oppose frequent rotation of night workers, while European experts favor more frequent

(Continued on Page 1264)

clinically unexcelled

Terramycin

for TOLERATION

EFFECTIVENESS

PURITY

POTENCY

ANTIBIOTIC DIVISION, CHAS. PFIZER & CO., INC., BROOKLYN 6, N. Y.

ld's largest producer of antibiotics

DON'T MISS

APPEARING REGULARLY IN THE J. A. M. A.

MEDICO-LEGAL DEVELOPMENTS

(Continued from Page 1260)

change. Americans were said to feel that rotated night workers were particularly subject to gastric disorders, possibly caused by necessity of repeated adaptation to new hours. The report was limited to discussion and fact-finding and is not proposed as the basis for a treaty. An ILO convention (treaty) becoming effective next January 21 specifies that a minimum of 30 square feet of floor area be provided for each crewman in ships of 3,000 tons or more. The agreement, drawn up in 1946 and revised in 1949, became effective upon ratification by the twenty-third country, Portugal. The convention has not been approved as a treaty by the U. S. Senate, although it was submitted by the President during the 81st Congress.

(Two reports on how ILO operates in medical and social fields appear in the *Journal of the American Medical Association* for August 23, 1952 (Vol. 149, No. 17). *Medical Care and the International Social Security Treaty* was written by Leonard J. Calhoun, Washington attorney and social security expert, who was alternate employer member for the American delegation to this year's ILO conference. The other, *The International Labor Organization—Its History, Purpose and Plans,* was prepared in the office of AMA's Committee on Legislation.)

U. S. MEDICAL BILL FOR 1951: 12½ BILLIONS

The use of student doctors in Veterans Administration hospitals was attacked and defended today at a meeting of the President's commission on health, which also heard that medical care in 1951 cost Americans about 12½ billion dollars.

Dr. Evarts A. Graham of St. Louis, a member of the commission, raised the student doctor issue when he told the meeting he believed the American Legion and other veterans organizations would protest if they realized the extent to which student doctors are used in the VA hospitals.

Dr. Joel T. Boone, chief medical director of the VA, replied immediately that the VA utilizes the services of student doctors very much as do private hospitals. Most of the students, he said, are postgraduates working under competent guidance.

Legion Commends Plan

The American Legion, Dr. Boone said, is fully aware that the VA uses student doctors and has commended their use. The Veterans of Foreign Wars, he asserted, recently considered a resolution critical of the practice, withdrew it, and then adopted a resolution that was not critical.

The report to the commission on the 12½ billion dollar medical bill of the nation in 1951 said about one-fourth of the bill was paid by the government. It estimated there are now 6,832 hospitals in the nation with 4,521,959 beds. In 1951 hospital patients numbered about 18,783,272.

A panel on medical care of veterans said that because of the difficulty in getting the necessary doctors and other trained personnel to staff hospitals the VA hospitals now probably have the maximum number of beds they can care for.

Choose Private Care

Dr. Anthony J. Rourke, president of the American Hospital association, said acceptance of prepaid hospitalization insurance has "markedly decreased" the clinical material available to hospitals with teaching programs. He said it is his impression that university services are receiving fewer teaching patients because "80 million people now covered by prepayment insurance find it possible to elect private services, rather than teaching services."

Dr. Rourke said that if the trend continues "our traditional teaching service will disappear and some other way will have to be found for training the doctors of tomorrow."

Hospitals with programs to teach and train young doctors and interns admit indigent patients for this purpose with the cost of care borne wholly or partially by the hospital.—*Chicago Tribune,* August 14, 1952.

THE HOSPITAL DOLLAR

The following is a condensation of a talk given by Mr. George Wood, administrator of Peralta Hospital, to members of the Medical Staff. Mr. Wood was asked to make his manuscript available to the Editorial Board for publication in this issue of the BULLETIN.

"This bill is terrible, and I'm not going to pay it!" The hospital cashier was having a bad time with the husband of a patient. "How can you expect a working man like me to pay $128 for three days of care? What we need is hospitals run by the government."

The man's wife had been brought into the hospital for an emergency appendectomy three days before. The bill, broken down, covered $52.50 for the room for three days, $60.00 for the surgery, $10.50 for routine laboratory, and $5.00 for drugs, etc.

The man did pay the bill finally—a little sheepishly and shamefacedly, after he was favored with a cool and friendly analysis of the charges and a comparison of them with his own economy.

The man was a plumber. He was asked, first, if the service his wife had received was satisfactory, and he agreed that the meals were good, the linen was clean, the nurses were courteous, competent, the hospital was obviously carefully and effectively operated in every way. He had no complaint as to the prompt and competent treatment of the patient.

"What would it cost the hospital," he was asked, "if you were to provide it with plumbing service over a continuous three-day period?"

(Continued on Page 1266)

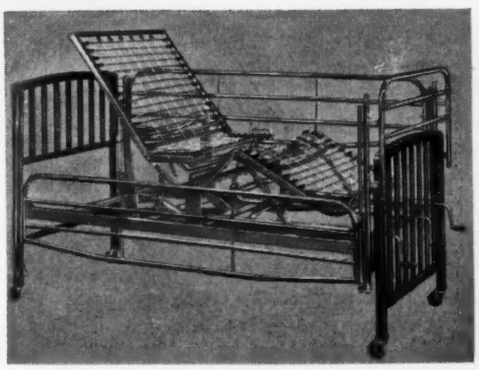
Look to *Randolph*

for SIMMONS Hospital Furniture and Equipment

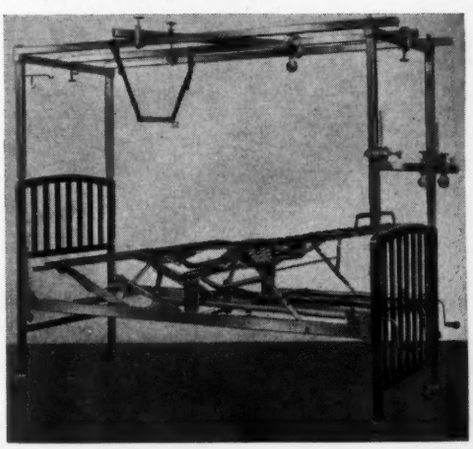
F-885 Single Pedestal Overbed Table has extra large top, space for storage inside, may be raised or lowered as necessary.

Famous Simmons furniture efficiently fulfills the requirements of every modern hospital. The ablest designers, engineers and color stylists are employed to assure you that Simmons furniture and hospital equipment is always up to date in design and function. Most Simmons Beds are so designed that supplementary equipment such as Simmons Safety Sides and Demountable Balkan Frames may be used interchangeably. The all metal construction of patient's room furniture makes it most admirably suited for hospital use because it is sturdy, rust-proof, fire resistant and easy to keep clean. The wide variety of cheerful colors and wood grain finishes make decorating attractive rooms remarkably easy.

Whether you are remodeling one room, adding new equipment or building an entire new hospital, you will find a combination of Simmons pieces here at Randolph that will fit your needs.



Above: H-48 Safety Sides attach to brackets on bed ends. Bed is Simmons H-885-3-L-171 Vari-Hite in up position. Below: H-800-3-L-171 equipped with H-16 Balkan Frame, a complete orthopedic bed.



"For Finer Equipment"

RANDOLPH SURGICAL SUPPLY COMPANY

PHYSICIANS AND HOSPITAL SUPPLIES

60 COLUMBIA ST. WEST
FOX THEATRE BLDG.

WOODWARD 1-4180
DETROIT 1, MICH.

THE HOSPITAL DOLLAR

(Continued from Page 1264)

"Plumber's rates are $22.00 for an eight-hour day," he replied.

"What about the two night shifts?" he was asked.

"Those would be at double time. That would be $44.00, each."

"So the cost for one day of constant attendance by one plumber would be $110.00."

"That's right. And for three days, it would be $330.00."

"And that's for wages alone. It doesn't include material. It takes more than 400 full time employes to operate Peralta Hospital—2½ employes for every patient, or 5/6ths of one person's efforts, around the clock, for your wife. In addition to this time, the hospital supplied food, linen, medication, surgical equipment, laboratory services, telephone services, dressings and techniques and skills which are at least as specialized as those of a skilled trade such as yours. In addition, the hospital assumed a tremendous responsibility for the safety of your wife."

There was a pause. "Do you still think your bill is too high?"

"For the first time," he said, "someone has taken the time to explain hospital charges to me, in language I can understand."

As gracefully as he could, the husband went out and paid his bill. He left with a good feeling.

The incident inspired some further analysis of comparative hourly costs of hospitalization compared with going rates among skilled trades. An electrician's rate per hour is $2.75, a machinist's $2.41, a teamster's $1.81, a laborer's $1.70. An analysis made of 70,516 patients admitted to Bay Area Hospitals during 1951 represented 374,027 patient days, or 8,976,648 hospital hours. Total money paid by these 70,516 patients was $10,003,042, a cost of $1.11 per hour, for all hospital services, including laboratory, surgery, et cetera.

The prevalent public misunderstanding of hospital charges is a good example of our failure in communications.—*Bulletin of the Alameda-Contra Costa Medical Association,* June, 1952.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physicians' groups in Michigan, follows:

1952

Nov. 17-18	Wayne County and Michigan Academies of General Practice Kellogg Center, East Lansing
Autumn	MSMS Postgraduate Extramural Courses State-wide

1953

Jan. 16-17	Sixth Annual Michigan Rural Health Conference Kellogg Center, East Lansing
Mar. 10	MICHIGAN INDUSTRIAL HEALTH DAY..Sheraton-Cadillac Hotel, Detroit
Mar. 11-13	MICHIGAN CLINICAL INSTITUTE Sheraton-Cadillac Hotel, Detroit Complete program will be published in the December JMSMS. Plan now to attend and secure your room reservations by writing Robert M. Buckley, Secretary, Committee on Hotels, Michigan Clinical Institute, c/o Sheraton-Cadillac Hotel, Detroit.
April 9	Genesee County Medical Society 8th Annual Cancer Day.....Flint
May 13	Annual Clinic Day and Reunion of Wayne University College of Medicine Hotel Fort Shelby, Detroit

Additions to this list of meetings are invited by the Editor of JMSMS, in order to make this monthly announcement complete and accurate.

Proposed

BEAUMONT MEMORIAL

"A little from many will build the Beaumont Memorial—a monument to the generosity of Michigan's medical men."—Otto O. Beck, M.D.

Beaumont Memorial Restoration Committee:

I attach my check in the amount of: $.....

OR

I pledge the amount of: $.....

payable on or before .....

to assist my fellow doctors of medicine of Michigan in building the Beaumont Memorial on Mackinac Island, Michigan.

..... M.D.

.....
street

.....
city state

Schering

CORTOGEN®

ACETATE

for

CORTISONE

therapy

CORTOGEN

The name Schering has come to stand for pioneering research and leadership in steroid hormone chemistry. Now Schering adds this new important product to its steroid line—available in ample amount to meet all your cortisone needs.

Available as 25 mg. tablets, bottles of 30. For complete information write to our Medical Service Department.

Schering CORPORATION · BLOOMFIELD, N. J.

Heart Beats

AMERICAN HEART ASSOCIATION TO ISSUE NEW SCIENTIFIC JOURNAL

A new bimonthly scientific journal, *Circulation Research,* the only publication devoted exclusively to reports on fundamental studies related to the heart and circulation, will be issued by the American Heart Association, beginning January, 1953, as a further step in the development of its professional education program, according to F. Janney Smith, M.D., Detroit, President of the Michigan Heart Association.

Circulation Research will be edited by Dr. Carl J. Wiggers, Professor and Director, Department of Physiology, Western Reserve University School of Medicine, Cleveland.

Circulation, which is in its third year of publication, will continue as a separate journal under the editorship of Dr. Thomas M. McMillan, Philadelphia. It will concentrate more fully on clinical problems and applied research, as distinguished from fundamental research in the cardiovascular field.

In announcing the new periodical, Dr. Irving S. Wright, President of the American Heart Association, said, "In a period of little over two years, *Circulation* as the official journal of the American Heart Association, has achieved a high position of recognition and respect among readers in the field of cardiovascular problems throughout the world. Because of the growing interest in the basic sciences and the limited space available for reports in this area, it was generally felt that the point had been reached where an entirely new publication, to be known as *Circulation Research,* should be issued. We are confident this new journal will be welcomed by the many physicians, investigators, and teachers who have long felt the need for an effective medium to integrate and disseminate new knowledge regarding fundamental problems which must first be solved before applied research can progress."

The editor of the new bimonthly, Dr. Wiggers, expressed the hope that *Circulation Research* would become "the medium for the best in various disciplines of fundamental research that may throw light on cardiovascular problems. These would include anatomic, biologic, biochemical, biophysical, morphologic, pathologic, physical, physiologic, and pharmacologic aspects, regardless of whether they emerge from laboratories of these basic disciplines or from clinical divisions." Dr. Wiggers added, "Since research acquires its full importance only after publication, the new journal will aim to narrow the gap between the completion of a discovery and its publication in the scientific literature."

In addition to original papers on fundamental research, editorials on appropriate subjects and short preliminary reports on "research in progress" will be included. For the present, the new publication will not include reviews or abstracts. Manuscripts will be considered for publication after October 1, 1952. They should be addressed to Dr. Carl J. Wiggers, Editor, *Circulation Research,* 2109 Adelbert Road, Cleveland 6, Ohio.

Circulation Research will have a format similar to that of *Circulation.* Each volume will consist of approximately 600 pages.

In order to encourage the widest possible readership, subscription rates have been set below publication cost. The American Heart Association will assume the difference in line with its policy of bringing to the medical profession knowledge of the latest scientific advances.

If you are interested in additional information regarding subscription rates to this new publication, just return the coupon below to the Michigan Heart Association.

TO: Michigan Heart Association
4421 Woodward Avenue
Detroit 1, Michigan

Please send me complete information on subscription rates to *Circulation Research.*

_____ M.D.

_____ Address

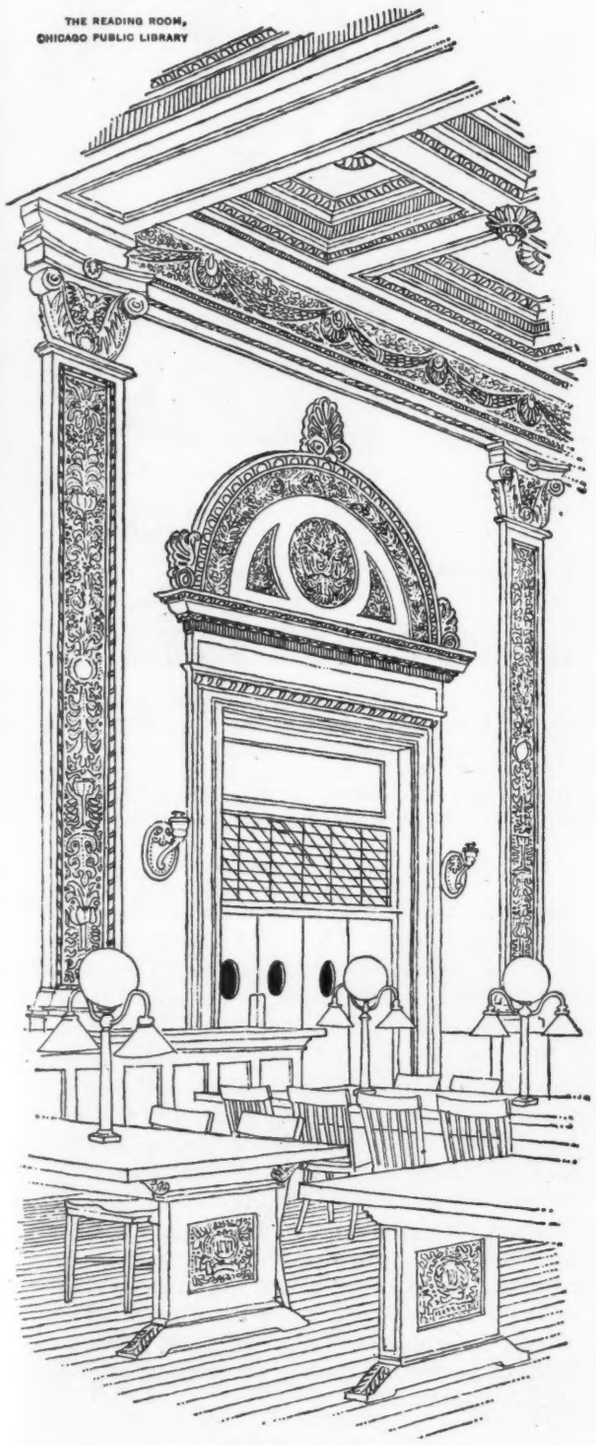
_____ City

New aureomycin minimal dosage for adults—four 250 mg. capsules daily, with milk.

From among all antibiotics, Ophthalmologists often choose

AUREOMYCIN

Hydrochloride Crystalline



because

Aureomycin penetrates the ocular tissues and fluids, after passing the blood-aqueous barrier.

Aureomycin in 0.5% solution is well tolerated by the conjunctiva.

Aureomycin may be used locally in appropriate solution; or by mouth; or, in emergency, intravenously; or by a combined approach, depending upon the seriousness of the infection.

Aureomycin has proved of value in a number of ocular infections in which other remedies have failed.

Aureomycin has been reported to be effective against susceptible organisms in the following conditions commonly seen by ophthalmologists:

Blepharitis
Conjunctivitis
Dendritic Keratitis
Epidemic Keratoconjunctivitis
Episcleritis
Periorbital Infection
Acute Trachoma
Uveitis

Throughout the world, as in the United States, aureomycin is recognized as a broad-spectrum antibiotic of established effectiveness.

Capsules: 50 mg.—Bottles of 25 and 100.
250 mg.—Bottles of 16 and 100.

Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

LEDERLE LABORATORIES DIVISION
AMERICAN Cyanamid COMPANY
30 Rockefeller Plaza, New York 20, New York

Say you saw it in the Journal of the Michigan State Medical Society

Michigan's United Fund Is Democracy In Action

Medical Profession Plays Prominent Roles In Successful Pioneer Venture

"The democratic approach to health and welfare problems" . . . Thus, does a Michigan doctor summarize the accomplishments of Michigan's United Health and Welfare Fund. Speaking from first-hand experience as a working member of one of the Fund's key committees, the Admissions and Budget Committee, Richard W. Pomeroy, M.D., of Lansing, is convinced that the United Fund "idea" is a powerful and positive influence in combating "socialistic" governmental concepts and in controlling "emotional" groups in the field of community health. "If these agencies are to provide the services for which they were created—services which justify their very existence—they must be adequately financed and agency personnel must not be burdened with the responsibilities of fund-raising campaigns. The United Fund, controlled and directed by voluntary representatives of the people who contribute to the support of these agencies, is the democratic approach to the solution of this problem," he declares.

Doctors have played prominent roles in the development of the United Health and Welfare Fund from the time of its organization in 1947. Warren B. Cooksey, M.D., of Detroit, first president of the Michigan Heart Association, was elected president of the United Fund in 1950 and was re-elected to that office in 1952. L. Fernald Foster, M.D., Bay City; G. F. Frederickson, M.D., Iron Mountain; S. Rudolph Light, M.D., Kalamazoo; and Otto K. Engelke, M.D., Ann Arbor; serve on the United Fund State Board of Directors.

While Michigan's United Health and Welfare Fund has been called a new approach to the problems of financing health and welfare agencies, it is in reality an attempt to develop the well-established Community Chest idea of federation on a statewide basis. According to F. A. McCartney, its Executive Vice-President and Director, the United Fund is not primarily a fund-raising organization. Its real purpose is that of integrating the forces and activities for voluntary community services which already are in operation in most of the communities throughout the state so that worthy state and national agencies may have a method of raising funds in a united way.

Local Community Chests were organized by civic-minded leaders to bring order out of chaos and to provide dependable financial support for the many local agencies which the people themselves were developing. In a similar manner, the United Fund was created by these people to accomplish the same results for agencies of a state and national character. Participation in the Fund is on a voluntary basis. The organizations and agencies, like the personnel associated with the Fund in local drives, are members voluntarily because they believe in the "community idea."

Warren B. Cooksey, M.D., Detroit, President of the United Fund, looks over the shoulders of F. A. McCartney, Lansing, new Executive Vice President and Director, Ivan L. Wiles, Flint, Chairman of the Admissions and Budget Committee, as they review the accomplishments of the Fund during the past year.

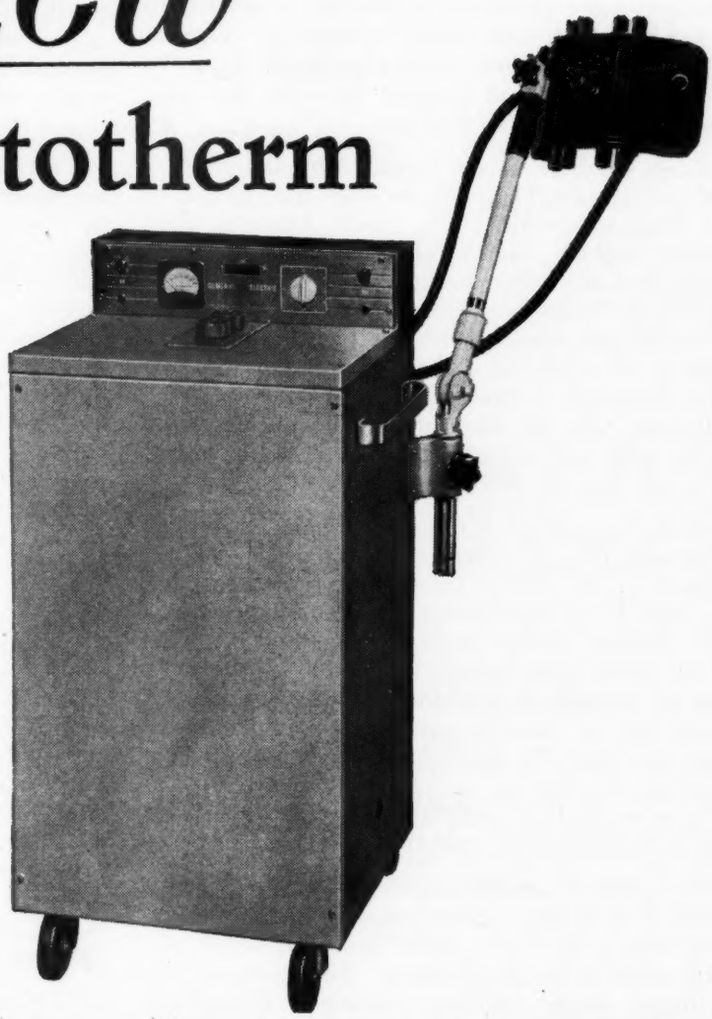
At the present time there are many counties throughout the state that lack organized Community Chests. In these areas the United Fund has assisted local civic leaders in conducting annual campaigns. It plans to continue these activities where requested. According to Mr. McCartney, the character of the Fund's operations is changing and will continue to change as communities develop their own organizations for fund raising. He believes, however, that the Fund will always be able to render valuable service in the fields of budgeting, public relations, campaigns and agency assistance.

(Continued on Page 1272)

You'll get a lot more out of the

all-new

GE Inductotherm

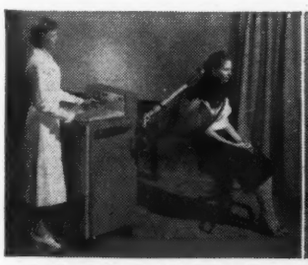


Now you can give your patients the desired quality and intensity for the full range of diathermy treatments. New GE Model F Inductotherm combines all the latest advances in induction heating therapy.

As shown in the pictures below, this handsome, trouble-free unit provides for a wide range of diathermy technics. Output has been raised to 200 watts — for most efficient utilization of induction heating methods. Unit is crystal controlled for absolute adherence to FCC-approved frequency.

Demand for the Model F is already great. To insure getting one of these great new Inductotherm units soon, call your GE x-ray representative right away. For illustrated literature, write

GENERAL ELECTRIC



Fully adjustable contour following electrode is part of the basic unit.

Optional is the 12 ft. treatment cable. Note how electrodes attach in rear.

Also available: fully adjustable air-spaced condensor type electrode.

Surgical facilities, integral part of unit, for all medium and light technics.

Direct Factory Branches:

DETROIT — 5715 Woodward Ave.
MILWAUKEE — 547 N. 16th St.
DULUTH — 3006 W. First St.

Resident Representatives:

FLINT — E. F. Patton, 1202 Milbourne
E. GRAND RAPIDS—J. E. Tipping, 1044 E. Keneberry Way
MUSKEGON — S. J. Zavodny, 1212 Jefferson Avenue

(Continued from Page 1270)

In his President's Report for 1950-51, Dr. Cooksey described the United Fund as a "federation of state and national agencies with strong appeal." This federation, he explained, has many basic advantages over separate campaigns. Because it budgets agency needs, money is raised and allocated more nearly in proportion to need than is possible with individual campaigns. Equally important, the United Fund spreads the base for financing health and welfare agencies and thus reaches new sources of revenue.

As an example of the accomplishment of these desirable results, Dr. Cooksey cites the records of five Michigan cities (Bay City, Lansing, Port Huron, Saginaw, and Ypsilanti) in which United Campaigns are being conducted. In 1947-48 prior to United Campaigns, these cities reported a total of 79,667 contributors to their fund-raising campaigns. In 1950-51, United Campaigns in these cities recorded a total of 103,826 contributors—indicating that the base of support for financing health and welfare agencies had been expanded by more than 20 per cent.

While extending United Campaigns to new areas required considerable headquarters staff assistance at the outset, the need for guidance has diminished as communities gain campaign experience. During the five years United Fund has been in existence, administrative costs have shown a decline inversely proportional to the amount of money raised. Administrative costs for 1948, for example, were 15.6 per cent; while administrative costs for the current operation have dropped to 6.9 per cent. It is expected that this percentage ratio will continue to drop during the years ahead.

Co-operation and teamwork in attacking health problems is another of the many advantages stemming from the United Fund approach which appeals strongly to Dr. Cooksey. He mentions the Michigan State Medical Society's Rheumatic Fever Control program as an example of this teamwork. This program in its early days was financed jointly by the Michigan Heart Association, the Arthritis and Rheumatism Foundation (both member agencies of United Fund), and the Society for Crippled Children and Adults. Today it is financed by the Heart Association.

In addition to Dr. Cooksey and Dr. Pomeroy; Stanley C. Brown, M.D., Ithaca; John Cowan, M.D., Michigan State Health Department and Clarence E. Umphrey, M.D., Detroit; are members of the Admissions and Budget Committee. This Committee, composed of businessmen, lawyers, bankers and representatives of other community groups as well as these doctors, is headed by Ivan L. Wiles, General Manager, Buick Motor Division, and has the responsibility of screening requests of agencies desiring to affiliate with the Fund, of reviewing the budgets of agencies participating in the Fund, and of establishing statewide goals for annual fund-raising campaigns.

Many doctors and lay persons felt the numbers and demands of various groups were getting out of control, according to Dr. Pomeroy. The individual asked to contribute had little way of knowing about the organization—whether it was justified; whether the group co-operates with existing agencies and other organizations or overlaps in its work; whether the group is financially sound and is organized and run on an efficient basis.

"The United Fund seems to be the 'Town Hall' for these groups in ways of organization as well as public relations and finances," Dr. Pomeroy declares. "The Admissions and Budget Committee functions as a screening committee between organizations and the public attempting to assist both parties. I was particularly impressed with the business-like approach to the study of agencies and their operations during the meetings of this Committee. Not only are the services of the agency considered, but organization and efficiency in providing these services are studied also. It is not unusual for the Committee to make recommendations to an agency for the purpose of improving its organization so that it may function more effectively. This all serves to unify the work and goals of health agencies with objectives of the medical profession to better meet the needs of the community."

The widespread acceptance of the United approach to the problems of financing worthy health and welfare agencies is proof of what citizens in a free democracy can accomplish through co-operation, according to Dr. Cooksey. Since 1947, when the United Health and Welfare Fund of Michigan was organized, United campaigns have provided opportunity for more than 80 per cent of the people of Michigan to contribute to Fund agencies in an orderly, unified way.

"This remarkable accomplishment assumes even greater significance when one realizes that it has been brought about by the voluntary action of hundreds of thousands of Michigan people," he explains. The Board of Directors, officers of the Fund, and committee members represent a true cross-section of Michigan citizens. Business, industry, labor, agriculture, and the professions—all segments of our present-day society are united in a common cause.

"Members of the Michigan State Medical Society can take real pride in the fact that the United Fund idea was pioneered in their state. Much has been accomplished in a brief space of time but there are many problems yet to be solved. We, as members of the medical profession, have a personal responsibility to continue our support of this program to assist in its further development."

***YOU** are invited to visit Michigan's finest medical supply showrooms . . . to see quality examining room and operating room equipment in actual office layouts . . . and a complete display of surgical and diagnostic instruments.*

OPEN
SATURDAYS
until 1:00 p.m.
Ample Parking Facilities

The J. F. Hartz Company
780 W. 8 Mile Road
Ferndale 20, Mich.

Phone JOrdan 4-5780
(No Toll Charge)

Michigan's Stake in Medical Education

The American Medical Association launched the American Medical Education Foundation some eighteen months ago. Its purpose is to raise funds from within the medical profession to help alleviate the financial strain of our nation's medical schools.

The AMA believed the Foundation was necessary because the doctors of medicine of the United States have a stake in the education of our future M.D.'s, plus the maintenance and safeguarding of the high standards of medical education. Our medical schools were, and still are, facing serious problems because of the lack of funds to hire or retain topflight instructors on their staffs. The loss of such personnel or the inability to employ them might lessen the quality of medical education or might even cause a school to close entirely.

The AMA further realized this important fact: Unless our medical schools continued to operate as integral and independent institutions, they might be forced to accept federal subsidies. Whether this happens or not is largely dependent upon the speed with which the medical doctors of America can be made to recognize school needs and produce the necessary financial leadership. It is also hoped that this leadership would attract additional assistance from industrial sources on a volunteer basis.

Financial solvency is a must whether it is in a corporation, a medical school or your own practice. Yet our medical schools are not financially solvent.

The medical profession is urged to give its wholehearted support to the American Medical Education Foundation. This support should be volunteered by every doctor of medicine in the nation with little or no urging. However, to date, the support has been far from adequate.

Michigan is one of the more fortunate states in that it boasts two excellent medical schools. Michigan's interest in medical education is very high and its support of the Foundation should be comparable. In the past year and a half, Michigan's medical schools, however, have received unrestricted grants totaling over $75,000 to supplement their operating budgets. To date the medical profession in our state, which numbers 6,050, with 5,214 members of the Michigan State Medical Society, is represented by 111 contributions, amounting to a little more than $7,000, made direct to AMEF. This is an undesirable record for a state that takes pride in being a leader in all things. (See final paragraph, this article—page 1276.)

There are several reasons why we of the profession should give our wholehearted support to the Foundation:

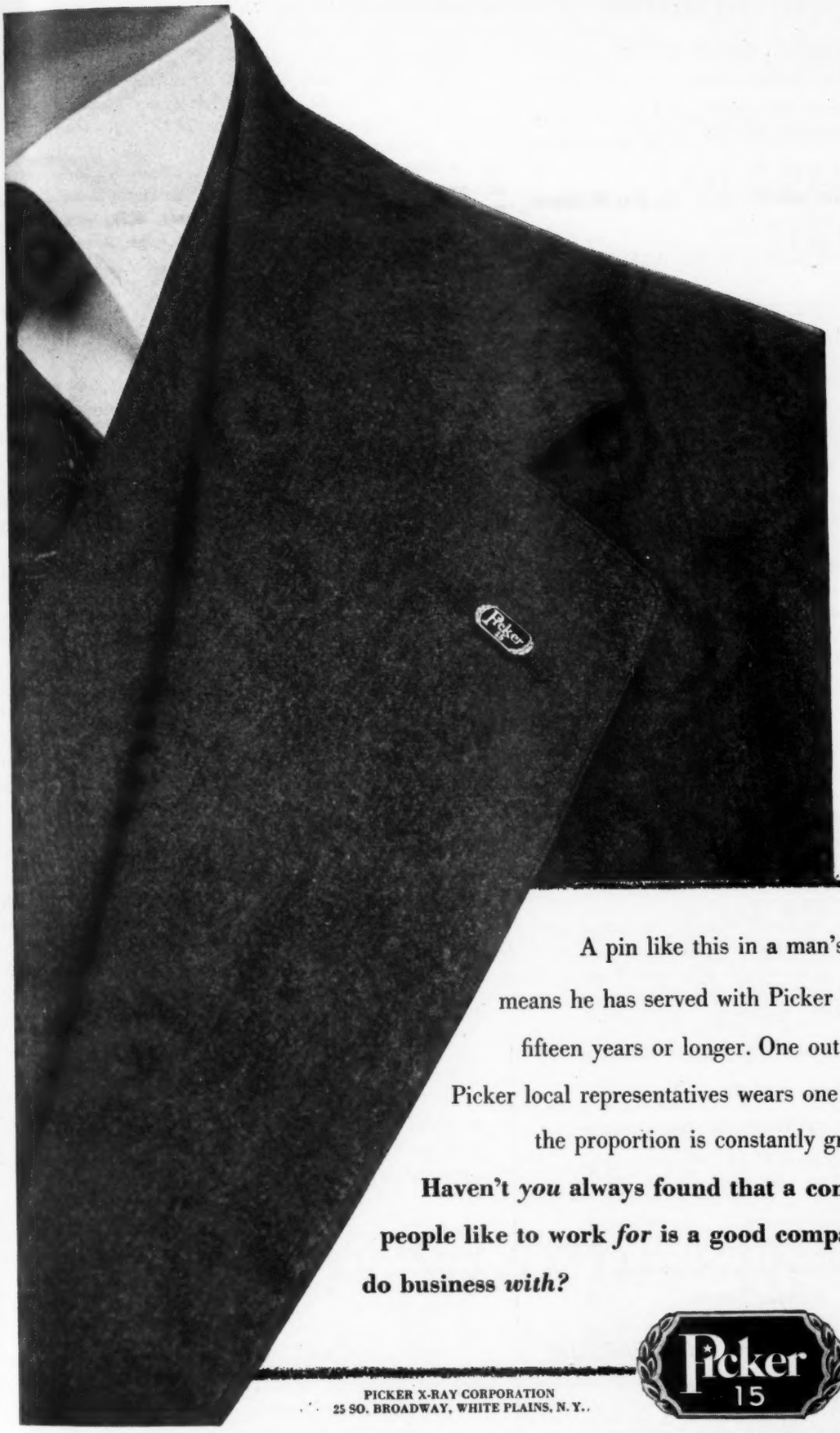
1. Better education for the young men who will follow in your footsteps and be charged with the responsibilities of carrying on the high traditions and standards of the profession;
2. Better health care for the nation as a whole;
3. Tax savings at a time when every deduction is important, and
4. The knowledge that your philanthropic dollar has been well spent.

The medical profession has at its disposal the instrument and the wherewithal to establish the financial leadership of a project which will attract additional needed support from American Industry—support sufficient in size and quantity to put our medical schools on a sound financial footing. The great force of American Industry, however, waits and watches for the individual doctor to come forth with contributions in sufficient quantity, before investing its dollars. A $100 contribution from every member of the Michigan State Medical Society would amount to more than $500,000 annually for distribution to our medical schools. The profession can't afford to neglect the health future of our nation.

Let us follow the lead set by Nebraska. Under the leadership of L. D. McGuire, M.D., the Nebraska AMEF committee has raised more than $60,000 in sixty days. And Nebraska has only 1,300 doctors of medicine. This should certainly indicate conclusively that the project is worthy of our support.

The job can be done in the four months remaining in this campaign year. This is America's greatest need. Write your check today. Make it your job to see that your fellow M.D.'s write theirs.

(Continued on Page 1276)



A pin like this in a man's lapel means he has served with Picker X-Ray fifteen years or longer. One out of six Picker local representatives wears one... and the proportion is constantly growing.

Haven't *you* always found that a company people like to work *for* is a good company to do business *with?*

Picker 15

PICKER X-RAY CORPORATION
25 SO. BROADWAY, WHITE PLAINS, N. Y.

DETROIT 2, MICH., 1068 Maccabees Building
BATTLE CREEK, MICH., 231 Eldred Street

GRAND RAPIDS, MICH., 48 Honeoye
FLINT, MICH., 4005 Du Pont Street

(Continued from Page 1274)

Checks should be made payable to The American Medical Education Foundation. You may earmark your contribution for the school of your choice, if you desire.

Let's contribute generously—and put Michigan in the lead!

Michigan contributors to the AMEF to August 1, 1952, include:

John Alexander, M.D., Ann Arbor; Carl Egbert Badgley, M.D., Ann Arbor; Paul Shirmer Barker, M.D., Ann Arbor; Roy C. Barlow, M.D., Ann Arbor; Robert C. Bassett, M.D., Ann Arbor; Gerhard Herman Bauer, M.D., Ann Arbor; Hugh McDowell Beebe, M.D., Ann Arbor; William H. Beierwaltes, M.D., Ann Arbor; Alvin Hermann Benz, M.D., Ann Arbor; Robert Berman, M.D., Detroit; E. B. Boldyreff, M.D., Custer; Clark D. Brooks, M.D., Detroit; James Marion Bryant, M.D., Ann Arbor; Howard Burrows, M.D., Dearborn; Irving F. Burton, M.D., Detroit; Duncan A. Campbell, M.D., Eloise; Mario S. Cioffari, M.D., Detroit; Ensign Engle Clyde, M.D., Plymouth; Frederick Amasa Coller, M.D., Ann Arbor; Clarence E. Crook, M.D., Ann Arbor; Arthur Covel Curtis, M.D., Ann Arbor.

John Sherrod DeTar, M.D., Milan; Henry Arthur Dunlap, M.D., Detroit; J. Collin Elliott, M.D., Buchanan; William A. Evans, M.D., Detroit; George Carl Fink, M.D., Ann Arbor; James M. Fisher, M.D., Detroit; Francis Bruce Fralick, M.D., Ann Arbor; Albert C. Furstenberg, M.D., Ann Arbor; Alexander Gotz, M.D., Ann Arbor; William Edward Grove, M.D., Johnstown; George W. Hagerman, M.D., Ann Arbor; Walter W. Hammond, Jr., M.D., Plymouth; Marvin Ray Hannum, M.D., Milan; Scott Thurber Harris, M.D., Ypsilanti; Louis Heideman, M.D., Detroit; L. Dell Henry, M.D., Ann Arbor; Leonard Edmund Himler, M.D., Ann Arbor; Frederick Bernard House, M.D., Ann Arbor; Willis Herbert Huron, M.D., Iron Mountain.

Robert Scott Ideson, II, M.D., Ann Arbor; Edna M. Jones, M.D., Northville; Edgar Adolph Kahn, M.D., Ann Arbor; Clifford Henry Keene, M.D., Ann Arbor; Earl Knaggs, M.D., Wyandotte; Leo August Henry Knoll, M.D., Ann Arbor; Theodore Kolvoord, M.D., Battle Creek; W. G. Mackersie, M.D., Detroit; Otto Tod Mallery, Jr., M.D., Ann Arbor; Donald Whitney Martin, M.D., Ypsilanti; Stephen C. Mason, III, M.D., Ypsilanti; J. J. McClintock, M.D., Detroit; Robert W. McClure, M.D., Detroit; Thomas H. McEachern, M.D., Ann Arbor; Harold Albert Miller, M.D., Saline; Norman Fritz Miller, M.D., Ann Arbor; Walter Neeb, M.D., Detroit; Reed Miller Nesbit, M.D., Ann Arbor; Erwin C. Nolte, M.D., Detroit; Carl Andrew Peterson, M.D., Hillsdale; H. Marvin Pollard, M.D., Ann Arbor.

Rigdon Keerans Ratliff, M.D., Ann Arbor; Howard Robinson, M.D., Detroit; Charles Howard Ross, M.D., Ann Arbor; Harold Schillinger, M.D., Dearborn; William E. Schumacher, M.D., Ann Arbor; Eugene Secord, M.D., Detroit; Eleanor Smith, M.D., Ann Arbor; Irene L. Martin Sparling, M.D., Northville; Claire Straith, M.D., Detroit; H. Saul Sugar, M.D., Detroit; Reed Wallace Teed, M.D., Ann Arbor; Elliott T. Thieme, M.D., Ann Arbor; Harry A. Towsley, M.D., Ann Arbor; Carl V. Weller, M.D., Ann Arbor; Charles J. Westover, M.D., Plymouth; Robert George Wetterstroem, M.D., Northville; C. J. Williams, M.D., Detroit; H. R. Williams, M.D., Ann Arbor; Frederick B. Williamson, M.D., Ypsilanti; Stuart Wilson, M.D., Detroit; S. B. Winslow, M.D., Battle Creek; Woman's Auxiliary to the Wayne County Medical Society.

These 111 contributions were made to the AMEF.

Other contributions were made **direct** to medical schools. A list of contributors to the two colleges of medicine in Michigan will be published in THE JOURNAL MSMS at a later date.

Surveys show it costs the Federal Government an average of $10.00 to make out every purchase order, and the government seems pleased that it is that low. Fifty per cent of all purchases made by the government are for less than $10.00.

If every cent paid for salary and wages by every factory industry in the United States last year had been turned over to the Federal Government, it would not have equaled the expenditures of the government.

Every baby born now in America has a debt of almost $2,000 represented in the Federal, State and local governmental indebtedness.

Battle Creek Sanitarium

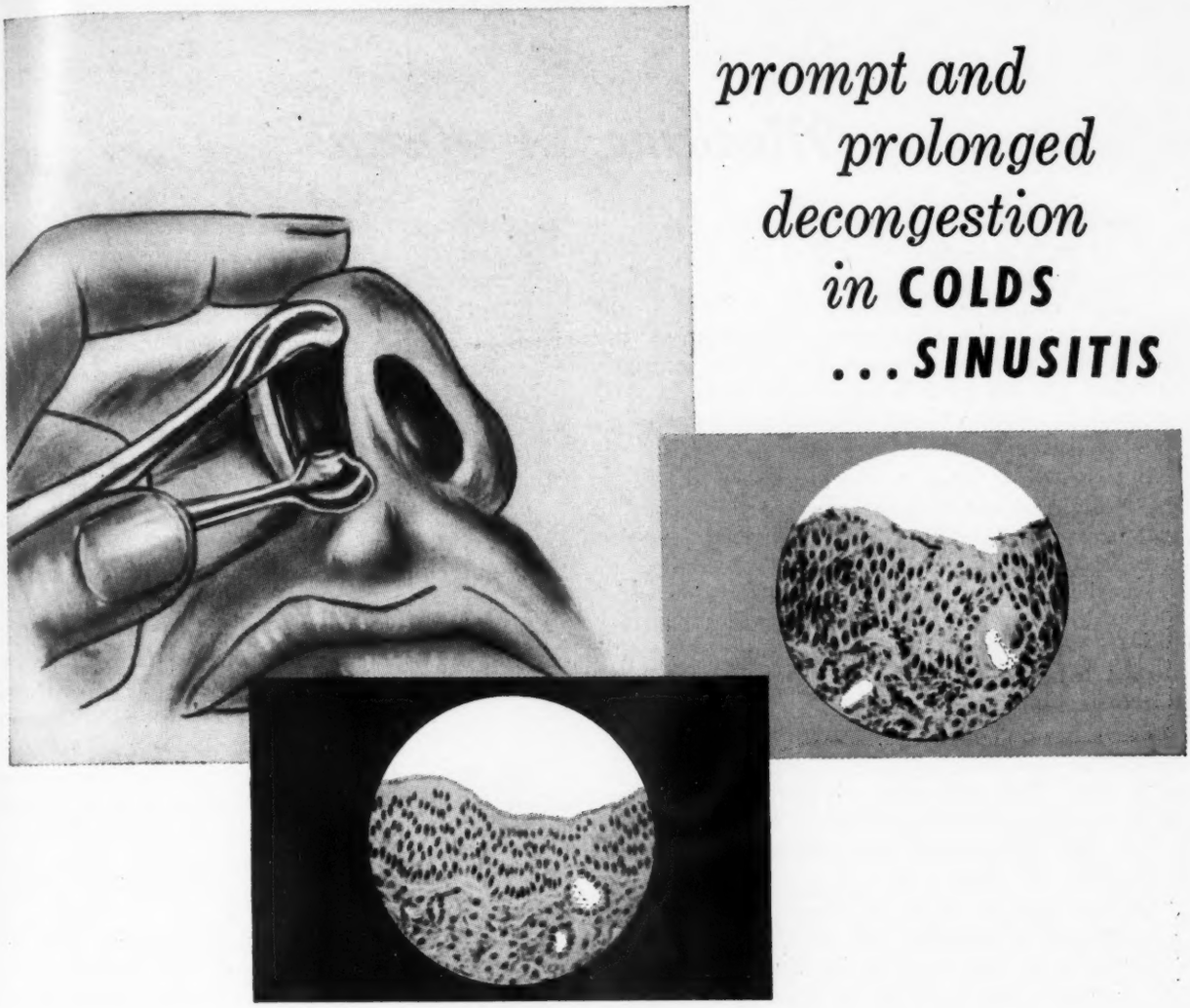
86th Year of
Continuous Service

A general medical institution fully equipped for diagnostic and therapeutic service. Close cooperation with home physicians in management of chronic diseases.

For rates and further information, address Box 40

THE BATTLE CREEK SANITARIUM
Battle Creek, Michigan

Not affiliated with any other Sanitarium



prompt and prolonged decongestion in **COLDS ...SINUSITIS**

Neo-Synephrine hydrochloride, through immediate and prolonged decongestive action, not only restores nasal patency, but also helps to reestablish and protect the physiologic defense mechanisms of the nasal cavity: sinus drainage and aeration.

Neo-Synephrine hydrochloride is notable for its relative freedom from sting and for virtual absence of compensatory congestion. Furthermore, it does not usually produce systemic side effects such as nervous excitation, cardiac reaction or insomnia.

The decongestive action of Neo-Synephrine hydrochloride is undiminished by repeated use—insuring relief throughout the duration of the illness.

¼% solution (plain and aromatic), 1 oz. bottles
½ and 1% solutions (when stronger vasoconstrictive action is needed), 1 oz. bottles
½% water soluble jelly, ⅝ oz. tubes

Neo-Synephrine®

HYDROCHLORIDE

Winthrop-Stearns INC.
NEW YORK 18, N. Y. WINDSOR, ONT.

Neo-Synephrine, trademark reg. U. S. & Canada, brand of phenylephrine

Medicine in Korea

"Health and Welfare of Troops in Korea at New High," according to a *Newsweek* headline of August 11.

"Korea combined all the worst features of World War II battlefields—the disease and filth of the countryside, the high, rugged mountains and lack of roads, and the great extremes of heat and cold," according to Major General George E. Armstrong, Army Surgeon General.

But this week, after two years of war in Korea, the Army Medical Service reviewed the lessons it had learned in combat in the Far East and the consensus of Army chiefs was that the M.D.s in service had written "a bright chapter" in the history of military medicine. As General Armstrong states, "We have in fact been far more successful than I believed was possible at the beginning of this operation."

Progress in medicine and surgery has been so rapid that the mortality rate among those wounded in action has reached the impressive low figure of 2.3 per cent per thousand in Korea as compared with 4.5 per cent per thousand during the Second World War.

Malaria.—Because the rice paddies are heavily infested with mosquitoes, doctors had anticipated a serious malaria problem in Korea. Actually, the incidence has been much lower than in the Mediterranean and Philippine fighting in the Second World War. In August, 1943, the Southwest Pacific rate soared to 696 per 1,000 men a year, compared to 15 to 16 per thousand in Korea!

Smallpox.—In spite of the virulent type of smallpox in Korea, only forty United Nations soldiers contracted the disease—although in the first year of fighting, 50,000 South Koreans became victims and 12,000 died. There have been no American cases since May, 1951.

Typhoid-Diarrhea and Dysentery.—Water pollution in Korea is widespread, but there has been very little typhoid. On diarrhea and dysentery, General Armstrong comments: "Conditions in Korea are ideal for the propagation of these diseases . . . yet the actual incidence during the first year was less than half of World War II experiences in Italy and the Philippines, and less than one-fourth the incidence in the China-Burma-India theater."

Cholera and Typhus.—United States troops in Korea were protected from cholera by vaccination and from louse-borne typhus by Lindane, a DDT successor which is deadly for Korean mites.

Epidemic Hemorrhagic Fever.—The most baffling of all ailments among the troops is epidemic hemorrhagic fever, which broke out a year ago. So far more than 1,000 cases among U. S. troops have been reported, with some 100 deaths. By early diagnosis, the doctors have reduced the death rate from 15 per cent to about 6 per cent, but they have not solved this medical mystery.

Infectious Hepatitis.—While improvements have been made in the diagnosis and management of infectious hepatitis, the doctors still do not know how to prevent its spread in troops; the death rate is low but the disease brings a long illness of sixty to seventy days.

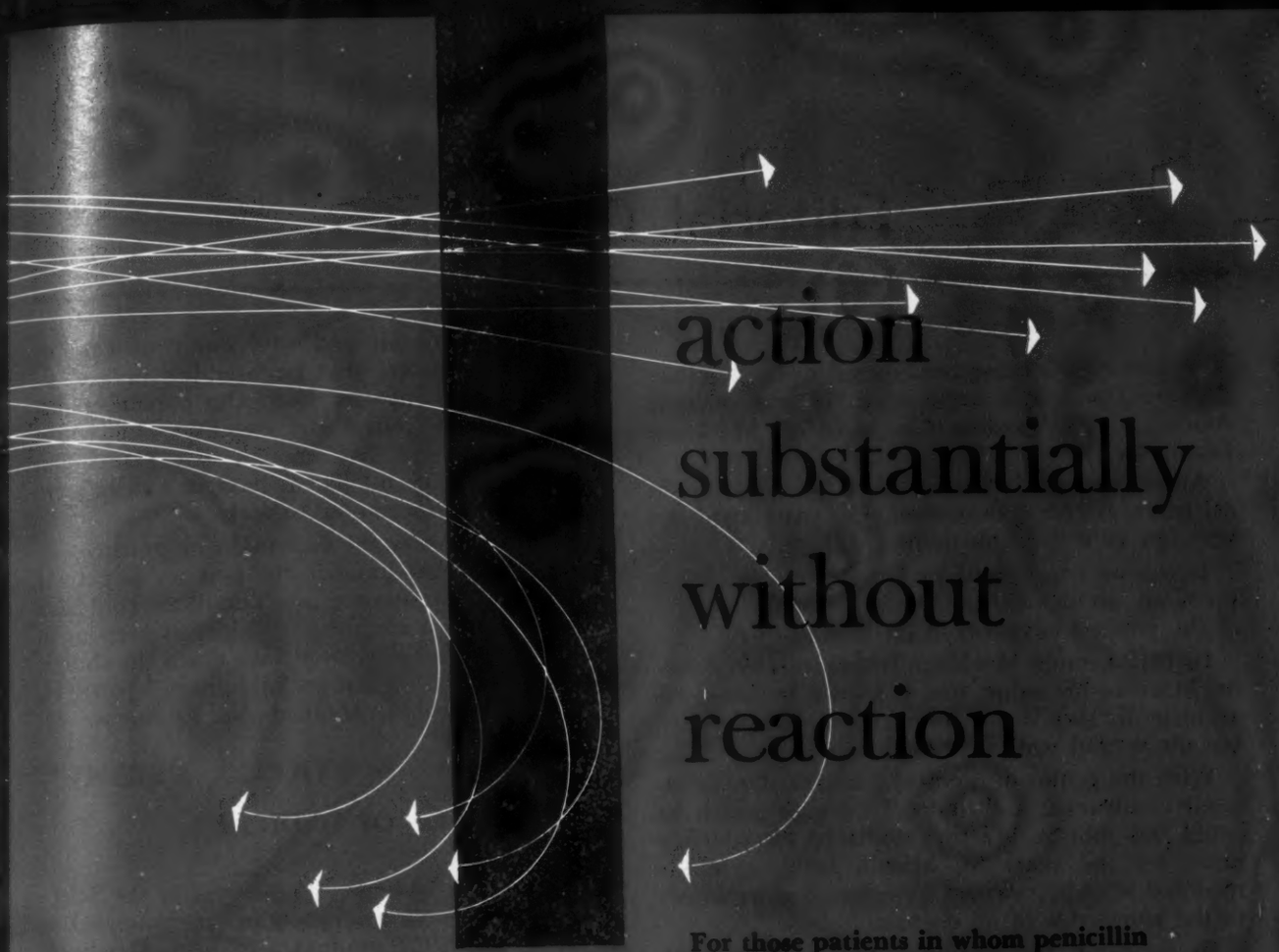
Encephalitis.—Nor has Japanese B encephalitis been conquered. More than 300 cases broke out in the summer of 1950; there were seventy cases last summer—but none so far this year. Scientists think they know the cause of the disease—a virus carried by the Culex tritaenior-hynchus mosquito.

VD.—Venereal disease rates in Korea are 186 per thousand per year; in Japan, 272 per thousand, compared with the total U. S. Army rate of seventy-three per thousand.

The NPs.—By using psychiatric facilities both at the front and at evacuation field hospitals, Korean NP rates are remarkably low. Discharge rate for NP are two men per thousand per year, compared with twenty-four per thousand in 1943 and 16 per thousand in 1945.

If it were not for the work and science of medical doctors in Korea, Japan, and on the U. S. mainland, the death rate in Korea would be far greater. *It is to be noted with pride that this life-saving job is being accomplished only by Doctors of Medicine—not by practitioners of any other branch of the healing arts.*

(Sentence in *italic* is ours.—EDITOR JMSMS.)



action substantially without reaction

For those patients in whom penicillin G causes sensitivity reaction, Cer-O-Cillin provides the same antibiotic action but is substantially free from side effects in most cases.

Upjohn researchers developed Cer-O-Cillin (penicillin O) by replacing the benzyl group of penicillin G with an allylmercaptomethyl group, thus making penicillin therapy available to nearly *all* patients.

For action substantially without reaction . . .

Cer-O-Cillin*

POTASSIUM

POTASSIUM PENICILLIN O (ALLYLMERCAPTOMETHYL PENICILLIN)

*Trademark

a product of **Upjohn Research** *for medicine . . . produced with care . . . designed for health*

THE UPJOHN COMPANY, KALAMAZOO, MICHIGAN

Editorial Comment

A LATE REWARD

A memorial is being constructed to Dr. William Beaumont through restoration of the historic American Fur Trading Co. store on Mackinac Island.

Almost everybody has heard of the great medical triumph of Dr. Beaumont, 140 years ago. But very few can recall his name.

It was an experiment by Dr. Beaumont—based upon an accident—that was responsible for one of the greatest advances in medical history.

In 1812 a young Mackinac Island trapper, Alexis St. Martin—his name, too, is known to few—was accidentally shot in the stomach. St. Martin lived but the wound was never healed.

With the genius of medical pioneers, Dr. Beaumont constructed a "window" through which he could look into St. Martin's stomach. He watched daily for the years St. Martin lived, carefully recorded what he saw and contributed marvelously to the knowledge of all doctors.

In financing the memorial to Dr. Beaumont, members of the Michigan State Medical Society are paying tribute to an exceptional individual with the knack of turning minor opportunity into major achievement.—*Detroit Times,* August 11, 1952.

THAT OLD ROCKING CHAIR

We doctors whose years in practice have passed the quarter century mark—my own age group, by the way—must be constantly on the watch that we don't let ourselves ease back in the old rocking chair. It's not scientific medicine that I'm talking about. Our medical organizations prod us into line if we show signs of getting slack. It's in the little things that we're likely to slip, like the way we run our offices, and in our dispositions and our dress.

When Joe Dokes comes in for that first consultation, he judges our office by what he can see. We've never been one to worry about appearances, but after a good many years of service the place may look down at the heels. We can't keep turning our equipment in for new models as long as the old fulfills the demands of modern medicine. But we can see to it that the office itself looks reasonably up-to-date and, above all, clean. We may be meticulous about the care of sheets and towels and sterilize everything with the greatest care, but if the surgery walls are gray with grime, Joe is likely to think that our instruments are dirty too.

And while we're cleaning house, it won't hurt to work on our dispositions a bit. We get so tired of the same old questions year after year and it's easy to turn Joe off and salve our conscience by reminding ourselves that he wouldn't understand an explanation anyway. But let us remember that when we were young and eager to build up a practice, we were glad enough to explain. Our Joe is an average intelligent patient, and he's entitled to the information he seeks.

As long as we want to remain in practice, we have to give that practice the best we've got. If respect for our profession won't do it, the cold hard facts of life in a competitive field will keep us in line. Then, when at last we take down the shingle we can get out the old rocking chair.—JOHN H. SCHLEMER, *Detroit Medical News,* August 25, 1952.

REGISTRATION OF MEDICAL GRADUATES

The National Advisory Committee to the Selective Service System has issued an urgent appeal to all 1951 and 1952 graduates of medical schools who have not already done so to immediately register with their local Selective Service System boards under the provision of Public Law 779. Previous Registration under the general selective service law, the committee warns, does not exempt male physicians under the age of 50 from registration under Public Law 779, nor does the fact that a physician is deferred as a regular registrant. The only male physicians who are not liable for registration under Public Law 779 are those who are currently members of reserve components of the Army, Navy, and Air Force. Previous military service does not exempt physicians from such registration unless they are currently members of reserve components of the armed forces.

Preliminary study of the 1952-1953 survey questionnaire of interns, residents, and fellows in hospitals, being conducted by the Health Resources Advisory Committee of the Office of Defense Mobilization, indicates that there is a considerable number of interns, residents, and fellows who are not members of reserve components who have not registered under Public Law 779.

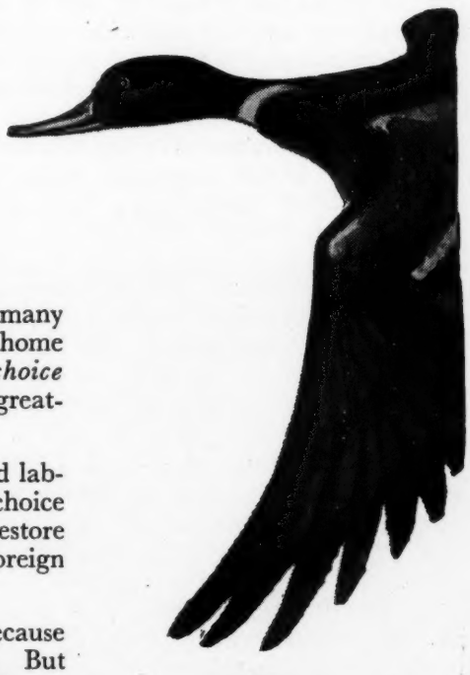
The National Advisory Committee is also asking its state advisory committees to check with state boards of medical examiners to obtain the lists of all physicians granted licenses within the past two years. These will then be checked against Selective Service Public Law 779 registration lists to discover those physicians who are not registered in accordance with the law.

In issuing its statement, the National Advisory Committee called attention to the fact that failure

(Continued on Page 1282)

"THERE'S ALWAYS A

Leader. . . . . MALLARD, INC."



Due Partly to a Tea Party 179 Years Ago

The revolution that followed the Boston Tea Party many years ago was fought against dictation by anyone at home or abroad. Here at Mallard we feel that *freedom of choice* is one of the important American Freedoms our great-great-grandfathers won.

Freedom of choice lets us choose finest ingredients and laboratory controls in our manufacture. Freedom of choice lets you seek the pharmaceuticals you feel will best restore your patients' health. There is no ruling edict by a foreign commissar.

We're convinced the American people benefit because you are absolutely free to prescribe their medicinals. But maybe we are predjudiced. It's your freedom that allowed you to choose Mallard for over 40 years. Thank you.

Karl O. Mallard

Karl O. Mallard
President, Mallard, Inc.

MALLARD
INC.
DETROIT 16, MICHIGAN

Say you saw it in the Journal of the Michigan State Medical Society

REGISTRATION OF MEDICAL GRADUATES

(Continued from Page 1280)

to register as a special registrant makes such delinquents subject to investigation by the Federal Bureau of Investigation and liable to prosecution by the Department of Justice. It also pointed out that it believed that failure to register on the part of many 1951 and 1952 graduates has resulted from lack of understanding that they were required to register under both the general Selective Service System law and Public Law 779. Such failure, the committee stated, however, is a specific violation of the Selective Service law.—Editorial, *The Journal of the American Medical Association,* August 30, 1952.

REPUBLICANS OPPOSE SOCIALIZED MEDICINE

Every American who is interested in bringing the nation's health standards to the highest level—as well as in the perpetuation of freedom—will approve of one plank adopted by the Republican Party at Chicago. It reads: "We recognize that the health of our people as well as their proper medical care cannot be maintained if subject to Federal bureaucratic dictation. There should be a just division of responsibility between government, the physician, the voluntary hospital, and voluntary health insurance. We are opposed to Federal compulsory health insurance with its crushing cost, wasteful inefficiency, bureaucratic dead weight, and debased standards of medical care. We shall support those health activities by government which stimulate the development of adequate hospital services without Federal interference in local administration. We favor support of scientific research. We pledge our continuous encouragement of improved methods of assuring health protection."

It is reported that this plank, when read, drew more applause from both the delegates and the galleries than any other part of the platform. On a number of occasions General Eisenhower has expressed his unequivocal disapproval of socialized or politically-dominated medicine, so it is certain that the plank is in accord with his views.

All partisan considerations to one side, the Republican Party's statements point to the only way in which the standards of medical care can be steadily and markedly improved. This fact is sharply underlined by the tragic experience of England and other countries, where socialized medicine has ominously reduced those standards, even as it has placed a tremendous burden on the taxpayers. In any enterprise or profession, the hand of the bureaucrat deadens and destroys, and medicine is no exception.

Socialized medicine may be a major issue in the coming campaign. General Eisenhower and the party he now leads have taken their stand—and it is the only stand consistent with American traditions, ideals, and hopes.—Editorial, *The Mediator,* August-September, 1952.

RECORD PRICES

The Federal Treasury reported Thursday that its tax take for the year ended June 30 was a record-breaking $69,970 billion.

The Federal Bureau of Labor Statistics simultaneously reported a new rise in the cost of living with its retail food price index now standing at 234.9, as compared with the 1935-39 average of 100.

A million auto workers were apprised that they would receive a 3-cents-an-hour increase under the "escalator" clause in their contracts tying wages to living costs.

All three of these news items are closely related in the causes and effects of inflation, which constitutes the gravest single problem with which this Country is faced today.

As a result of inflated costs the Government must now pay at least twice as much for the same commodities and services as in 1939-40. That's one reason why taxes have shot up as they have. The other reason is that the Government has assumed new obligations at home and abroad for which the people must pay. A good many of these are unnecessary.

The total Federal, state and local tax collections this year are estimated at close to $90 billion.

While taxes have been creeping up to where they take more than 30 cents out of every earned dollar, inflation has been taking 47 cents out of the same dollar.

Yet the Government overspent its income last fiscal year by approximately $4 billion. The estimated Federal tax take in the current fiscal year is $68.7 billion, an increase of more than $3 billion over last year. Yet President Truman predicts another deficit of about $10 billion in fiscal 1953.—*Detroit Free Press,* August 23, 1952.

A THREAT TO MEDICINE

Dr. Joel T. Boone, medical director of the veterans administration, addressed a threat to the civilian profession of medicine that if there is not continuing coöperation with government medical projects it may mean the end of civilian medicine. He said that, in the absence of a relationship satisfactory to the bureaucrats, the government "would have to take over."

The Truman administration has for a long time talked in a large way of installing a system of compulsory health insurance and of resorting to various

(Continued on Page 1284)

NEO-IOPAX®
(Sodium Iodomethamate U.S.P.)

A safe urographic contrast medium remarkably free from hazard for the patient.

NEO-IOPAX

Pictures without penalties

NEO-IOPAX *urograms and* PRIODAX *cholecystograms*
give definitive information for diagnosing certain pathologic conditions of the urinary and biliary tracts, respectively—without penalty.

SCHERING

PRIODAX®
(Iodoalphionic Acid U.S.P.)

A well tolerated cholecystographic agent, conveniently administered

PRIODAX

Schering CORPORATION
BLOOMFIELD, N. J.

Federal Medicine

VA HOSPITALS FORCED TO CLOSE

The Public Health Service is being forced to close four of its general hospitals as a result of Congressional cuts in Veterans Administration appropriations, Oscar R. Ewing, Federal Security Administrator, announced August 11, 1952. He explained that funds cut would have provided contract care for Veterans Administration patients in Public Health Service hospitals.

The hospitals, located in Kirkwood, Missouri, Mobile, Alabama, Portland, Maine, and San Juan, Puerto Rico, will discontinue admitting patients within a few days and will be converted to outpatient clinics as soon as provisions can be made for their present patients.

Dr. Leonard A. Scheele, Surgeon General of the Public Health Service, stated that this unexpected cut amounts to about $1.5 million and requires a reduction from 650 to 375 in the number of Veterans Administration patients cared for by the Public Health Service.

"When curtailment became necessary," the Surgeon General said, "these four hospitals were selected because their patient load is made up of more veterans and fewer Public Health Service beneficiaries than that of any of the remaining Public Health Service facilities.

"Aside from this loss, limited funds in fiscal year 1952 and in our 1953 budget have made it necessary to reduce staff in our hospitals by nearly 350 people during the past four months," Dr. Scheele said. "This additional and unexpected reduction in available funds can be met, therefore, only by curtailing our operations and by converting the four general hospitals with the smallest average number of patients to outpatient clinics."

In addition to the reductions in staff already effected, another 350 employes are involved in the closings. A few of the personnel will be retained to operate the outpatient clinics and as many as possible will be transferred to other Public Health Service hospitals or other Government facilities. Personnel officers of the Public Health Service are being detailed to each of the hospitals scheduled for conversion to assist employes wishing to remain in the areas of the converted hospitals to find employment either in Federal agencies or in private industry.

Patients in Public Health Service hospitals include American merchant seamen, officers and enlisted men of the Coast Guard, Federal employes injured in line of duty, and others for whom the Service is responsible under law.

Editorial Comment

A THREAT TO MEDICINE

(Continued from Page 1282)

devices to equalize medical attention between those more able to pay and those less able to pay. It has invariably insisted that it had no design for socializing medicine.

These declarations of innocent intent must be measured against Dr. Boone's clear threat and his peculiarly intimate relationship with the administration and the White House. As a rear admiral in the navy, he served as the White House physician during Republican administrations of the '20s, then returned to active duty with the navy. Last year he was appointed to his position with the veterans administration. Although listing himself as a Republican, he has been associated during his career of 38 years of active practice with state medicine, and he brings to bear a viewpoint sympathetic to government direction rather than to the freedom of the private practitioner.

The sense of the phrase to "take over" is well understood. It means that the government will assume command of the practice of medicine and of all those who engage in it. It means that government will decree the kind of medical attention given, who is to receive it, what the costs shall be, and how they are to be met. If the government were to "take over," the government would operate all hospitals, all medical schools, all research in medicine, all nursing, and probably all such related activities as dentistry, etc.

This socialist organization of medicine would be bound to rest upon compulsion. Once one major profession fell to the state, what would stop all others from going the same way? We should have a nationalized legal service, a nationalized press, and all of the rest of it, until finally no area of freedom survived and the Bill of Rights would have become a dead letter.

Perhaps the servitude of the professions might have a temporary attraction for the masses who had been led to believe they would get something more for nothing—or for what looked like nothing. But this attitude would quickly prove to be a delusion. The servitude of one group of free citizens soon becomes the servitude of all. The philosophy that the government can "take over" is the philosophy of total dictatorship.—*Chicago Tribune,* August 17, 1952.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of the Council

VOLUME 51 OCTOBER, 1952 NUMBER 10

How Can We Have Better Medicine?

By Paul de Kruif
Holland, Michigan

THIS TALK is dedicated to the memory of Dr. Andrew P. Biddle, father of Michigan's postgraduate medical education. May we always remember him with the reverence due an honest man—what's education but a life-long discipline toward honesty?

Straight-shooting. . . . That's the secret of better medicine.

But what's wrong with medicine now? Amid praise of its miracles we hear muttering. All is not so good. There is indignation—about cruel costs of medical care. There is anger—against surgeons said to be operating needlessly or when antibiotics might cure. There's resentment—by those who say their doctor pooh-poohs them when asked to consult with a specialist. We hear gripes about waiting-room weariness. And there is bitterness—about doctors who won't come to our homes when we're sick and scared in the night.

When we go to the root of them, most of these kicks blow up in their author's faces. Yet some do turn out to have a basis of fact. Beyond any other profession the doctors have a tough row to hoe—when we are ill we are scared and lonely and we (and our families) are in need of the not easy magic of the comfort only a natural-born doctor can give. And if we don't get it—right now—plus what we think is top scientific treatment—then—on the part of some of us it is just too bad for our doctor. And a black eye for *all* doctors. This is the doctors' special burden.

If these kicks came only from crackpots, or pinkoes with an axe to grind, they wouldn't be so disturbing. . . . But, your speaker has friends—take Boss Kettering. He deeply admires the medical profession and detests regimentation. Yet Ket has said that if doctors don't look sharp they're going to get socialized.

Here's the doctor's dilemma. The rank-and-file practitioner now drags more people back from death than did the most expensive specialist, 20 years ago. Medicine is far and away the most beloved, most *trusted* profession. Yet today it's under attack . . . by an *untrusted* federal government. Washington's crypto-communist, mink-lined, deep-freeze regimenters are out to turn doctors into pen-pushing form-filler-outers, pill-passing robots. . . . No fooling.

It's especially because our doctors have been free to take the time and the care to do their best for us that we love and trust them. Okay. We'll go on doing just that, if the doctors do their best to make their medicine better and better. . . . Then we'll believe less and less in the verbal muck slung at medicine by untrusted federal government would-be socializers.

Many years ago Michigan's doctors faced up to the fact that it cost most people far too much to be sick and to try to keep from dying. This was an act of honesty. Led by Henry Luce, our state's doctors twenty-five years ago began to grope toward a practical way for families to budget for their health as they budgeted for groceries. . . . By voluntary, prepaid health insurance.

President Hoover's Committee on the Costs of Medical Care proposed it and drew a blast from the doctors' home office, the American Medical Association, 535 North Dearborn, Chicago—then the national medical powerhouse as the home

Andrew P. Biddle lecture delivered at the 87th annual meeting of the Michigan State Medical Society, September 24, 1952.

office of the United Mine Workers is John L. Lewis's personal powerhouse now.

Voluntary health insurance? "Socialism and communism, leading to revolution" boomed the then spokesman from the then powerhouse. Undaunted, Michigan's top doctors dug away in their grass roots and by 1939 came up with a plan jointly with the hospital people by which citizens might prepay to keep from going busted by the catastrophe of paying fees for big operations and board for long stays in hospital.

The doctors had to start from scratch; the nation's top insurance experts hadn't the foggiest notion what a family'd have to pay yearly to cover the doctor's services and keep the health plan from going busted. They badly mis-guessed the figures at the start and pretty soon the Michigan Medical Service—that's what it was called—went 500,000 bucks in the red. It wasn't the public, it was the doctors who'd lose if the plan went broke; they'd gambled their professional services. They had no federal Santa Claus to go to. There was grumbling, naturally, by many doctors. It took guts (the four-letter word for both faith and honesty) to keep them participating; there'd be no Michigan Medical Service now if it hadn't been for Henry Carstens, and its great success is due to tough men like your distinguished president, Otto Beck, Bob Novy, and others.

Michigan's doctors learned prepaid voluntary health insurance the hard way—till now, 82 per cent of the state's physicians are participating, and starting from nothing just twelve years ago, 2,600,000 Michigan citizens budget for health in Michigan Medical and Michigan Hospital Service—costing them only a bit over $100 a year, no matter how large the family.

For their great act of honesty, Michigan's doctors can take a bow for their pioneering of voluntary prepaid health insurance with more than 80,000,000 Americans already covered by one or another type of it, and it's this and this only that drove the Truman-Ewing regimenters back into their holes not long ago when they were out to make medical robots of all of us—doctors and patients alike—by compulsory government medicine.

But in the 1940's it was amazing and absolutely fantastic that Michigan's doctors and doctors everywhere—but notably those of Michigan, California and Colorado, fighting for better medicine, were in the doghouse at their Chicago home office. California, Colorado and Michigan doctors were accused of stirring up the animals by their "radical" activities. From the Chicago home office, then *still* the powerhouse, came lofty answers to public kicks about bad medicine to the general effect: *The public be damned.*

No wonder Fern Foster asked his famous question: "Why are we doctors individually pretty much 140,000 little tin gods to our patients and at the same time 140,000 so-and-so's—as a national organization?"

So Michigan doctors did another act of honesty, calling a conference of presidents of state medical societies not stooges of the home office powerhouse. The final upshot? As of June, 1949, the powerhouse lost its kilowatts. The AMA's home office became what it is today, a magnificent clearing house for action for better medicine, for deeds and plans pouring in from the medical grass roots, from county and state medical societies from coast to coast and from the humblest individual doctor. It's now the G H Q for better medicine, for *honest* medicine, for all Americans. Such now is the new American Medical Association.

This strong north wind of honesty, very bracing, hit your present speaker when he first met Elmer L. Henderson, then president-elect, and George F. Lull, general manager of the AMA. Said Elmer, looking me in the eye, "You'll find we're straight-shooters." His look said he did not mean maybe.

How you need straight-shooting to fight government domination is shown by the way one of the top modern life-saving discoveries nearly went into the ash can. . . . Thanks to the then government powerhouse. It's now history how Leo Loewe, the Brooklyn boy, changed nearly 100 per cent fatal subacute bacterial endocarditis to potentially 100 per cent curable—by his massive penicillin-heparin treatment.

But what, in 1944, nearly happened to Leo's discovery? Every dose of the then still scarce penicillin was under control of the federal Office of Research and Development, the OSRD. Big medical wheels had tried out penicillin against this murderous endocarditis. Dose—40,000 units daily. All victims died. From the OSRD went out the *Word:* Penicillin ineffective, none available for subacute bacterial endocarditis. But Leo Loewe had other ideas. . . .

Giving two, five, ten *million* units of penicillin daily by intravenous drip, he dragged twenty-five

endocarditis victims—doomed—back to life. The late Jack Smith, penicillin production genius at Pfizer, bootlegged all penicillin needed by Leo. OSRD threatened government proceedings against Jack—for his crime of disobedience—that saved those lives. Your present speaker, writing Leo's discovery for *Reader's Digest,* was warned by an emissary from the government wheels that Leo "was at least potentially dishonest." But the *Digest* editors bet their blue chips on Jack Smith and Leo, and pretty soon Leo had cured so many incurable victims, it would have been a real stink if OSRD hadn't released penicillin for endocarditis. . . . So they did.

Had those big wheels wanted the poor devils to die? Of course not. What they had was what Boss Ket calls the instinct of negativity, meaning we did not discover it so it cannot be so.

Michigan's doctors can sniff out and scotch negativity. It is one of the purposes of the Michigan Foundation for Medical and Health Education. Investigatory action.

This negativity is likely to lurk wherever there is that intangible powerhouse, scientific authority. It's trying right now to tie the can to medication that may possibly check fatty degeneration of the arteries, champ killer in mid-life and after. It's surmised that sick, fatty livers may be at least in part at the bottom of this degeneration of the arteries, atherosclerosis.

Now it has long been known, experimentally, that lipotropic substances (including the B vitamins choline and inositol and the amino acid, methionine) move deadly fat out of livers—of dogs. Among other investigators, Dr. Henry A. Rafsky of New York, has observed the good effect of a lipotropic combination—Methischol—plus high animal protein, high vitamin diet—on human cirrhosis of the liver.

(Indeed, it's a safe bet this talk tonight would not have been given if Dr. Rafsky hadn't chased the fat out of your present speaker's cirrhotic liver . . . with the aid of Methischol. . . .)

It's Henry's hunch that we're really as old as our livers, and there's a hint, repeat *hint,* of hope for retarding and even reversing the atherosclerosis dangerous to heart and brain, if patients are religiously maintained on high animal protein, low fat, high vitamins—plus lipotropics. Debatable, but not disproved.

What, then, was your present speaker's amazement when his son, Hendrik de Kruif, M.D., reported a remark made by a scientific authority at a round-table conference on atherosclerosis at the AMA meeting, last June. "I trust nobody here is so bold"—said this authority—"as to admit that he prescribes lipotropic substances for atherosclerosis."

"Dismissed them. Just like that. Gave no evidence," said Hendrik.

"What's really wrong with medicine?" your present speaker not long ago asked Elmer Henderson and his surgeon competitor and friend, Josh Lukens of Louisville, Kentucky. "Just one thing, professional jealousy," said Josh. "Right—absolutely," said Elmer.

Professional jealousy isn't, by a long shot, confined to general practitioners who may now and then give the brush-off to families asking for a specialist's opinion. This envy can operate at high levels. Last summer the distinguished surgical investigator, Charles Huggins, of the University of Chicago, got a rising ovation at the end of his Ramon Guitéras lecture before the American Urological Association, at Atlantic City.

Huggins told them, modestly, how his new operation, total adrenalectomy, had eased the pain, returned to strength, and was prolonging the lives of some—but by no means all—patients on whom he'd performed it. These were victims of far-advanced cancers that had started in the prostate or breast. Huggins made no claim of cure. He stressed that this operation was the last thing to try when all else had failed.

The novelty of this surgery excited the audience, for how were these victims to live at all—with no adrenals? The chemical miracle stirred the listeners. These patients lived and felt fine just by taking 50 milligrams of cortisone by mouth—two little 25 milligram pills, twice daily. Huggins showed them a movie of a moribund man, with no adrenals, but now back at work as a boilermaker. He showed a movie of a woman given up for dead, who'd gained 40 pounds and now looked lovely in her garden. He told of cases where adrenalectomy had failed but said the operation was safe in the hands of competent surgeons and hormone men.

It's only a last ditch hope, for some hopeless. Yet what alert family doctor would turn down this slim chance for his dying patient? How many poor wretches, far-gone with advanced cancers of breast or prostate, cachectic and in pain—yet still wanting to live—wouldn't risk this new adrenalectomy?

Especially, when their doctors knew that this operation was simply a solid, scientific step beyond the orchiectomy—removal of gonads—by which, long before, Huggins had added years to lives of prostate cancer victims?

Your present speaker had no sooner finished writing this story—it's going to appear in the AMA's *Today's Health,* and *Reader's Digest*—when came a blast—from a scientific authority—to the effect that Charles Huggins was a fake and he would not send a *dog* to Huggins. So said this authority.

(We wonder why such authorities do not themselves discover remedies for ills over which they are authoritarian.)

Professional jealousy can make the difference between life and death; and in one medical field there has been a vast saving of life because doctors have subdued this childish paranoia. Chicago's doctors pioneered this, by routinely calling in obstetric consultation for childbirth too tough for their own skill. The result?

Largely because they put the fight for life ahead of their personal vanity, they've beaten mother and newborn deaths down to worldwide, all-time lows. Herman Bundesen led Chicago's doctors in this fight for life. He has one simple measure of better medicine: *his yardstick is the down of the death rate.* Bundesen's prescription against professional jealousy (including his own) is a motto, "You can get anything done, if you don't care who gets the credit." Consultations? "They're a human right as in the law it is the right of all of us to courts of appeal," says Herman.

In Boston there works a mild, kindly, gray-haired, terrific little man, William G. Lennox, M.D. Some of you have heard of him; some not. To Lennox this doesn't matter. He's too busy as he has been for thirty years, beating the devil out of epilepsy—by an utterly selfless teamwork of neurologists, pediatricians, electroencephalographers plus plain general practitioners. They've transformed epilepsy from dark and demoniacal to a temporary electrochemical storm in the neurons of the brain. It is now a definitely hopeful disorder.

Lennox's forthrightness brews the better medicine now robbing seizures of their old devilish horror. This is the way Lennox lays it on the line: "Thousands of patients are still having seizures because of failure to get enough of the right medicine. Many patients, after visits to many doctors, are bewildered, discouraged and still convulsing." "This need not be," writes Lennox. And if he were saying it, his low voice, so brave and true, would go round the world like short-wave radio.

Why need it no longer be? Because of a big battery of powerful chemicals: phenobarbital, Dilantin, Tridione, Mesantoin, Mebaral, Phenurone, Hibicon, Milontin, Aureomycin and the new M-144. But also, because of you doctors. "The medical doctor (and that includes general practitioners) interested in the patient as a person, up-to-date and open-minded about calling expert aid," says Lennox, "is usually in the best position to care for most patients."

Surely, this new hope for 850,000 epileptics is of interest to your Michigan Foundation. Interest in the patient as a person would be out, if doctors were to become compulsory government medicine robots. A robot has no heart for friendship.

A new, selfless teamwork by doctors has spread statewide in California. Its State Medical Association, working with citizens, has transformed the most precious of all medicines—human blood—from deadly scarcity to routine availability—for all needing it, whose lives may be saved by it. California's doctors have formed a blood brotherhood with citizens, a statewide chain of community blood banks all sponsored by the CMA. They've organized routine blood generosity unattainable by the Red Cross.

It began only six years ago. It has grown so that blood's magic is now on tap day and night for 10,000,000 people 365 days a year, and when you ask the doctors, "who is dying for lack of blood in California?" they look you in the eye and say—*"nobody."*

What about Michigan? The doctors of Holland, Michigan, led by Otto van der Velde, have built a marvelous little blood bank system in their town. In some ways it's even better than California's. But Holland's doctors haven't even been able to spread it to include all of Ottawa County. In all the rest of Michigan there's no system like Holland's, whose physicians have made the capital discovery that the citizens—Dutchmen and you know how *they* are about money—are generous about their blood. A $64 question: Why not a blood brotherhood for all Michigan? And for every state in the Union?

The general practitioner is the G.I. Joe of medi-

cine; it is not here the intention to butter him up and slobber over him as the gentle old doc with the beard at the bedside of the dying child. He no longer has the beard; and the children don't die. He is medicine's white hope. He is in danger, from his own miracles.

Now when a patient has acute chest pain, coughing, feverish, it is easy to say: "Don't take him to the hospital, it's only pneumonia." Pneumonia a few years ago—captain of the men of death. Thank God for the antibiotics. Now when a young man or woman has early infectious syphilis the general practitioner can cure it, nine chances out of ten, in his office in one five minute session. Penicillin-aluminum-monostearate—PAM. What hath God wrought!

Not so long ago the general practitioner was mainly pretty much the bedside comforter and it was the public health men who were downing the death rates. Telling about the late great Cy Young, founder of Michigan's State Health Department Laboratory, Greg Christian, your veteran fighter for better medicine, put it this way—

"Cy Young—not an M.D.—will be remembered as saving more lives in the last twenty-five years than all of us Michigan M.D.'s put together."

Now the ghost of the great Cy Young has life-saving company, the general practitioner. But here is his danger. It's fine not to have to take the patient's sputum to a laboratory for the verdict the nice little mice give about the type of pneumonia. Just give him a big shot, or so many capsules, of the best antibiotic. Here's the catch: Slap-dash diagnosis, say of virus pneumonia, may miss something—more sinister—early lung cancer.

Medicine hasn't yet simplified itself into a quick shot in the buttock. Yet, keeping up with science, it is amazing what the general practitioners can do in their offices or in a patient's home. Your present speaker knows a husky Alabaman, Sherman Curtis, today driving a Diesel locomotive on a fast run on the Seaboard railroad. Three years ago in hospital he was dying, fever spiking to 108, frightful pain, fulminating rheumatism. Sherman's doctor took him by ambulance to Tom Spies who then had the only cortisone in Birmingham. One shot of cortisone.

Then, home. Three shots of cortisone three times a day for four days by Sherman's own doctor. The fifth day Sherman was up in the morning getting coffee and orange juice for his wife and himself.

But how does the general practitioner know on what patients to try cortisone and ACTH? How is he going to use these marvelous hormones, safely? Many ivory tower highbrows seem more interested in warning how dangerous they are than in how they may be used to drag sick people out of needless misery.

Tom Spies (whose insight it is that disease is only chemical and chemically correctable) at a cortisone conference in Birmingham, showed 500 doctors a parade of fifty people (now he has hundreds like them). They'd all been so sick with disorders from rheumatoid arthritis to deadly lupus erythematosis that they'd lost their livelihoods. Spies had given them cortisone and/or ACTH. Short courses, at intervals. None staying in hospital, all treated at the clinic. They were not cured, but they were virtually free of pain and all working and self-supporting—rehabilitated and looking the world in the eye.

The average doctor is hot to learn this new science. The present speaker asked his friend, Dick Bloemendaal, why he was so keen about the great Michigan State Medical Society project, the Beaumont memorial. "Beaumont's our best inspiration, showing what a general practitioner can do," said Dick, "because he was so gentle to St. Martin, and worked with no laboratory, no gadgets to make his discovery—just his eyes, his brains and his two hands."

Last year John W. Cline, then president of the AMA, told your medical society about medical chiselers. He said that 95 per cent of doctors obey their code of ethics. "It is the code of a gentleman in the practice of medicine," said John Cline, himself as able and fighting a gentleman as this speaker has seen. But 5 per cent of *congenital* chiselers constantly embarrass the decent 95 per cent of ethical doctors. Said Cline—"These congenital chiselers no longer deserve to be in the company of gentlemen and should be excluded from your company."

This is medical honesty at its top; it's the job of local grievance committees with teeth, as they have in Colorado.

Even after you'd tossed all your chiselers out, all would not yet be sweetness and light between patients and doctors. The California Medical Association has faced the fact that doctors have far too many dissatisfied patients. Sponsored by the CMA, the Alameda County Association's secretary, Rollen Waterson, launched an inquiry—by

a chap who really knew human beings. This was Ernest Dichter, Ph.D., of New York.

The results were outwardly innocent; their implications—terrific: What do patients think of their doctors; what do doctors think of their patients; and what do doctors think of other doctors? The upshot of the investigation is epochal. It has resulted in a new job, a new dignity for the old family physician—the last of the independent medical Mohicans. In the Alameda plan the general practitioner becomes a *personal physician* —a specialist in the whole human being.

This new personal physician is the general manager of his patient's health, guiding him through the confused maze of modern medicine. He does all he himself conscientiously can to diagnose and to treat his patient. Then, if a specialist is needed, he says why and calls the specialist in the patient's presence, finds out the probable cost, gives the patient a buildup, as a person, to the specialist. The personal physician doesn't leave it at that: he follows through till the sickness is cured, or over, for better, for worse.

He's constantly and always available for anything relating to his patient's health. He guarantees his services regardless of the patient's inability to pay. (As our own Pat O'Brien, the world's ace TB fighter, long ago proposed, the personal physician can see to it that free consultation is provided, if necessary.)

When we're sick, we're often desperate for a friend who really knows the score. The personal physician is the friendly and effective advocate for us before the unfamiliar and awesome court of medical appeal. The personal physician is our economic friend, too, holding himself responsible if a specialist tries to soak us; he defends us from that iniquitous 5 per cent of chiselers.

This personal physician does not look down his nose at his patient as a layman. The Alameda plan recommends the word layman be dropped from the medical vocabulary. This new doctor tells the patient all he knows about his illness, what the treatment's going to be; and he comes clean about what the patient may hope for; so the patient becomes a doctor along with his doctor.

The know-how of the conscientious personal physician is going to cut down our medical bills; he'll see to it we're not needlessly—as now often happens—given the x-ray and laboratory diagnostic works in hospitals. He treats us as often as he can in office and home.

We can't have that kind of personal physician if the government takes our doctors over; we would be numbers; our doctors would be robots. And we cannot have a real personal physician in a closed panel prepaid insurance plan where the doctors are hired hands, not free. David de Kruif, M.D., the present speaker's younger son, recently quit the spectacularly successful (financially, that is) Permanente Health plan in California—because its streamlined efficiency kept him from continuous contact, from follow-through, with his patients.

This personal physician will certainly be welcomed by mothers of families; it's here suggested that the women's auxiliary of your society take a close look at the Alameda plan.

Now to end it, dropping into the first person singular. My salaams to you doctors of medicine. Three times in the past twenty-seven years you've saved my life, but that isn't the point. Yours is a sacred, not scientific activity. The Biblical good Samaritan (good Sam they call him in California) did his stuff just once. You've got to be good Sams night and day.

You do not fathom the power of your mercy, fantastically expanding, for the hurt, the sick, the sad, the crazy, the hateful, the dying and all in despair. You of all men (if we can keep this rickety old shebang, civilization, together) have our future in your hands.

It touches me beyond words that you have found me worthy to speak to you. This is my promise: from federal and all other shover-arounders I'll try to do my bit to keep you free.

THE CASE AGAINST THE INCOME TAX

The great weight of the burden of the average taxpayer has come to be recognized by the medical profession as a definite mental oppression upon many of our people. In a quiet, homey talk with an eminent physician recently, he stated that many psychopathic cases can be laid at the door of the income tax laws. Frustration, discouragement, and the inability of people, he says, to accommodate their minds to these oppressive and dictatorial laws bring them to the verge of "cracking up." Often members of their families literally have to drag them to competent medical advisers. Then starts a long and protracted fight to restore their health. In truth, he said, it is difficult even for the stolid, sturdy individual, let alone the weak and the sick, to withstand the pressures brought upon them by the government.—From "Man to Man," by Bernard N. Ward, C.P.A., The Caxton Printers, Ltd., Caldwell, Idaho, 1952.

Milestones in Our Knowledge of Diabetes Mellitus

By Bruce C. Lockwood, M.D.
Detroit, Michigan

OUR PRESENT knowledge of diabetes mellitus is not yet complete, but the story of the development of that knowledge forms an interesting part of medical history. It is interesting not only to the internist but to all other branches of medicine. Diabetes is an old disease. It is seen as a complication in most specialities, and it has been a part of most phases of scientific medical advances.

Diabetes is also of interest in that advances in the disease, and medicine in general, have usually followed advances in the ancillary sciences of astronomy, physics and chemistry, and more recently biology and biochemistry.

Another point of interest is that the ups and downs of diabetes, and medical history, have closely accompanied the ups and downs of economic and political stability from nation to nation, during different periods.

The Papyrus Ebers, 1500 B.C., contains the first reference to diabetes, describing polyuria and its treatment by a concoction of plant and berry extracts with honey.

Celsus, 10 B.C., according to Allen[1] gave the first clear description of diabetes, "polyuria without pain but with emaciation and danger."

In 50 A.D. Aretaeus again described the disease and gave it the name Diabetes from the Greek meaning siphon or to run through.

In 1492 historians tell us that Columbus sailed west from Spain hoping to find a shorter route to India and the Orient for the transportation of spices. Those spices were pepper, cinnamon, camphor, cubebs, aloes, cloves, nutmeg, onions, sassafras, cochineal and garlic, all of which were used as medicines in the multiple herb concoctions used by the Europeans to treat disease, including diabetes, at that time.[6] They were light and lucrative cargoes for ships and caravans which plied their perilous way to and from the Orient. Competition was keen between the countries for this business. At first the Venetian Republic controlled it and rose to power and wealth. Then the Portuguese took it by finding a way around the Cape of Good Hope. Then the Dutch who were great sailors took the business from the Portuguese. The English sea power developed in the sixteenth and seventeenth centuries, and by defeating the Dutch ruled the seas, and took possessions in eastern countries. Thus it is seen that the founding of the British Empire as well as the discovery of America has its root in medical history.

Columbus did not find a shorter route to India and the Orient and he did not take back spices. He did however take back syphilis, a disease which rapidly found its way throughout Europe.

During the period of alchemy, 1500-1600, heavy metals were used extensively in the treatment of all diseases, including diabetes. The practice was accelerated by the discovery of the value of mercury in the treatment of syphilis. Paracelsus was the chief proponent of this therapy. He also made a contribution to knowledge of diabetes in that he found that crystals were formed on evaporating diabetic urine, which he, however, mistook for salt.[9]

The century, 1600-1700, was a period of general scientific advancement.[5] There was separation of chemistry from alchemy; founding of the Royal Society of London; the period of Harvey, Leeuwenhock, Hooke, Boyle, Newton, Malpighi, Wirsung, Glisson, Bartholin, Willis, Peyer, Brunner, Graffian, Havers, and other notables.

In 1675, Thomas Willis, a professor at University of Oxford, discovered that the urine of diabetics was sweet to the taste, like honey. Matthew Dobson, also a professor at the University of Oxford, in 1775, confirmed that diabetic urine was sweet to taste, and also that diabetic blood was sweet to taste. He evaporated diabetic urine and got a crystalline mass which was very sweet and which fermented the same as grape sugar; thus the first grasping of the fact of sugar in the urine came about.

In 1790, Cullen, Professor of Medicine at Edinburgh, added the word mellitus to diabetes to distinguish the condition from diabetes insipidus. In 1796 John Rollo (England) first treated diabetes by diet. He gave mostly animal food, protein and fat, with much clinical improvement of patients.

During 1800-1850, diabetes was considered to be a disease of the stomach in which vegetable foods were changed to sugar. Treatment was by diet, chiefly of animal foods, especially fatty meat, grease, lard, suet and oils. This type of diet often

led to nausea, vomiting, anorexia and semi-starvation; hence began the earliest use of high protein (present day tendency), high fat (Newburgh), under-nutrition (Woodyatt, Wilder), and starvation (Allen, Joslin) types of diet treatment.

Trommers qualitative test for sugar was developed in 1840; the Fehling test for sugar in 1850. Claud Bernard (France), the father of physiology, did the first quantitative blood sugar estimations in 1850. He also discovered glycogen and postulated that high blood sugar was due to overproduction by the liver.

Bouchardot, 1870, a clinician in Paris during its seige by the Germans, made many advances in the management of the diabetic. He advocated daily urine tests, exercise, under-nutrition, fast days, green vegetable days, twice boiled vegetables, and the use of gluten bread, all of which are yet valuable, even in the days of insulin.

In 1875 Kussmaul (Germany) gave the first detailed description of acidosis. Kulz, in 1880, discovered oxybutric acid in urine of diabetics. Naunyn, Lenné, Von Norden and others in 1885-1905 advocated diet of low carbohydrate and protein with high fat, fast days, and alkalies for acidosis.

In 1889 Van Mering and Minkowski found that pancreatectomy in dogs always led to a severe and fatal diabetes. After this discovery there followed much unsuccessful research attempting to obtain a potent non-allergic pancreatic extract for the treatment of diabetes. Opie reported degeneration of Islands of Langerhans in 80 per cent of diabetes in 1900.

During 1910-1920, Guelpa, Allen, Joslin, Wilder, Woodyatt and others used undernutrition, starvation, low carbohydrate, protein and fat, with fast days.

In 1921, Banting and Best discovered a method of extracting a potent useful pancreatic extract of Insulin. They found that insulin in watery pancreas extract was destroyed by the external ferments. By macerating fresh pancreas in 50 per cent alcohol the external ferments were destroyed while the insulin was held in solution; the filtrate containing the insulin was then precipitated by 95 per cent alcohol, filtered and re-dissolved in water.

Newburgh, in 1926, advocated moderate carbohydrate and protein with high fat to cover normal caloric requirements, fat as high as 3.8 gm. to carbohydrate 1 gm. was used. This same year, Abel isolated pure crystalline insulin, a protein high in cystine (sulphur) combined with zinc. Ten years later (1936) Hagedorn combined insulin with protamine and zinc to make a slow acting repository insulin.

Research by Hussay in 1936 showed that depancreatized dogs with the pituitary also removed, had a very mild diabetes with no acidosis but if fasted, died of hypoglycemia.[7] Long and Lukens proved that the same is true if the adrenals are removed.

In 1937 Young found that by injecting anterior pituitary extract into dogs a permanent diabetes could be produced with swelling and fibrosis of the Islands of Langerhans.[10]

Bailey and Bailey, 1943, produced a selective destruction of the beta or insulin producing cells of the Islands of Langerhans by the intravenous injection of Alloxan, a substance chemically related to uric acid.[2]

In 1945 Cori and associates demonstrated *in vivo* and *in vitro* that both anterior pituitary extract and adrenal cortex extract inhibit hexokinase, a liver enzyme necessary to initiate the change of glucose to glycogen. They also demonstrated that insulin inhibits the effect of anterior pituitary extract and adrenal cortex extract on hexokinase.[4] This mechanism is diagramed in Fig. 1.

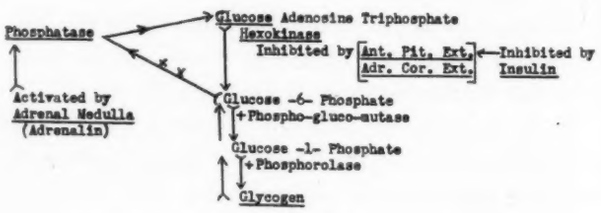


Fig. 1.

Conn, in 1948, showed that an animal can be protected against the diabetogenic effects of alloxan by the injection of glutathione, a normal constituent of the body.[3] In 1949 Conn found that a transient diabetes could be produced in animals and humans by ACTH. This transient diabetes was accompanied by (1) a decreased blood glutathione; (2) an increased urine uric acid; and (3) a decreased renal tubular absorption of glucose. Conn hypothesized that with this purine upset, there was produced a purine metabolite which had an Alloxan-like effect, reducing the intracellular availability of free sulf-hydryl (-SH)

groups which are necessary for the normal activity of many enzyme systems. A combination of decreased intracellular -SH tnd increased intracellular purines impaired the functional activity of the insulin producing island cells, and also interfered with the peripheral glucose utilization by inhibiting those enzyme systems requiring -SH groups. It also decreased renal tubular absorption of glucose by inhibiting the enzyme system within the tubular epithelium. In other words Glutathione sulf-hydryl (G-SH) acted by impairing those enzyme systems which need free sulf-hydryl groups for normal function, namely, (1) systems involved in utilization of glucose; (2) renal tubular resorption of glucose; and (3) systems responsible for production and release of white blood cells.

During 1950-51 several clinical refinements have been further utilized, notably, (1) the earlier detection of diabetes by popularizing more frequent urine examination; (2) the use of a balanced diet moderately low in carbohydrate and fat and moderately high in protein, covered by adequate insulin; (3) refinements in the use of medium long acting insulin; (4) the recognition of hypopotassemia during coma by electrocardiographic examination.

Summary and Conclusions

In this chronological review of diabetes mellitus twenty centuries of observation is narrated in about twenty minutes. Perhaps it has been oversimplified.

History shows that progress and regress in our knowledge of diabetes, as well as medicine and science in general, has been concomitant with political and economic stability or instability in the various countries.

History also show that much that appears to be new may be old things rediscovered and refurbished. The dietetic treatment of diabetes has been cyclic since 1800.

Our knowledge of the biochemistry and pathophysiology of diabetes has made great advances since the isolation of insulin in 1921. The most fertile fields for future investigation lie in the study of the hormonal control of enzymatic tissue processes, and the behavior and fate of radioactive tagged nutritional components.

Biblography

1. Allen, F. M.; Stillman, E., and Fitz, R.: Monograph of the Rockefeller Institute for Medical Research. 11:1, 1919.
2. Bailey, G. C.; Bailey, O. T., and Johnson, M. W.: Proceedings American Diabetic Association, 8:215, 1948.
3. Conn, J. W.: Science. March 18, 1949.
4. Cori, C. F.: The Harvey Lectures. Science Press, Lancaster, Pa., 1945.
5. Dampier, Wm. A.: History of Science. Macmillan, New York.
6. Haggard, H. W.: Devils, Drugs and Doctors. Harper & Bros., New York, 1929.
7. Houssay, B. A.: Diabetes. New England J. Med., 214:971, 1936.
8. Park, R.: History of Medicine. Davis, Philadelphia, 1908.
9. Stubbs, S. G. B., and Blight, E. W.: Sixty Centuries of Health and Physic. Hoebler, New York, 1929.
10. Young, F. S.: Diabetes. Lancet., 2:372, 1937.

ON THE RUN . . .

There is increasing doubt as to the efficacy of alcohol in angina and in peripheral vascular disease.

. . .

Those with evidence suggesting glaucoma should not be given belladonna or its analogues and such patients should always be questioned as to their recent use of these drugs.

. . .

Latent jaundice is always present in patients with congestive heart failure. When the jaundice becomes manifest the prognosis is bad.

. . .

Work demand on the heart results first in increased systolic blood pressure, next in pulse rate and last in diastolic blood pressure.

. . .

Hemochromastosis may develop in patients given multiple whole blood transfusions such as for aplastic anemia.

. . .

Serious shock seldom develops in the burned patient who maintains a steady, adequate urinary output.

. . .

Multiple sclerosis rarely occurs before the age of fifteen or after fifty-five.

—Selected by W. S. Reveno, M.D.

Comparison of Diabetic Control with NPH and Globin Insulin

Preliminary Report

By Joseph T. Beardwood, Jr., M.D.,
C. Robert Tittle, M.D.
Philadelphia, Pennsylvania

Robert M. Packer, Jr., M.D.
Abington, Pennsylvania

THIS STUDY was undertaken to compare the effects of globin and NPH insulin in the twenty-four hour control of a series of diabetic patients studied under hospital conditions.

NPH insulin differs from protamine zinc insulin in that it contains about 40 per cent as much protamine and this is in a re-crystallized form. It also differs in that there is practically no free protamine in the mixture. It has a pH of not less than 7.1 and not more than 7.4.

Globin insulin is a clear, almost colorless solution; the U-80 strength possesses a pale amber color while the U-40 strength, being more dilute, is practically colorless. The insulin is modified by the addition of 3.8 mg. of purified globin (derived from beef hemoglobin) and 0.30 mg. zinc, as a zinc salt, per 100 units of insulin. The solution also contains 1.5 per cent glycerin in order to make the solution isotonic and thus minimize any possible local irritation or discomfort. The product is sterilized by filtration. The addition of phenol, 0.25 per cent, as well as the acidity (pH 3.6), contributes to the maintenance of sterility during storage and use by the patient.

It is not pertinent to this paper to review completely the voluminous literature on modified insulins, but it has been accepted in the literature for some time as the majority opinion that the action of globin insulin with zinc extends on the average of 16 to 18 hours and reaches its maximum approximately 8 hours after administration.

Peck[4] states that globin insulin behaves much like a mixture of 3 parts regular and 1 part protamine insulin, having significantly less duration of effect than a 2:1 mixture. This experience, however, was based on fasting blood sugar levels only. Colwell's[5] studies, on the other hand, show a somewhat greater intensity of action of globin insulin from the twelfth to the sixteenth hour compared with a 2:1 mixture and slightly less pronounced later effects. Peck noted that Colwell's curves were obtained, because of his method of study, in relatively mild diabetics who could have been treated for long periods without insulin. Consequently, the duration of the effect of all preparations tested may have appeared prolonged beyond the time commonly observed in treating severe cases clinically. Colwell further pointed out and first reported the possibilities of using single injections of globin insulin in large doses. He felt that the time action blood glucose curves with 60 unit dosages reveal no significant differences for the three intermediate insulins, NPH, globin and the 2:1 mixture. Therefore, the choice must be made on other considerations than their timing characteristics, and this choice could be determined only by trial and comparison of the response by different degrees of severity of diabetes. Globin insulin is a clear insulin, which may have some advantages clinically over NPH, which is cloudy suspension.

Sugar and Alpert[6] found that with diet and activity constant, comparisons of globin, NPH and 2:1 mixtures showed the best control was obtained with globin, although they did not make blood glucose determinations between 4:00 p.m. and 8:00 a.m. the following day.

The Council on Pharmacy and Chemistry[1] of the AMA stated that "the pharmacologic action of NPH is similar to that of other insulins and that its blood sugar lowering action is intermediate between globin and protamine zinc insulin." This "official statement" has been accepted in the literature and it is our attempt in this study to determine the time action of globin and NPH insulin throughout a twenty-four period.

This study represents a report on twenty-two consecutive diabetic patients admitted to the Metabolic Services at Abington Memorial Hospital and the Graduate Hospital of the University of Pennsylvania who met the following criteria:

1. They were considered to be adequately controlled by accepted standards and were using NPH insulin in greater dosages than 20

From the Metabolic Services of the Abington Memorial Hospital and the Graduate Hospital of the University of Pennsylvania.
This study was financed in part by a grant from Burroughs Wellcome and Company, Inc.
Globin insulin used in this study was Globin Insulin B. W. & Co.

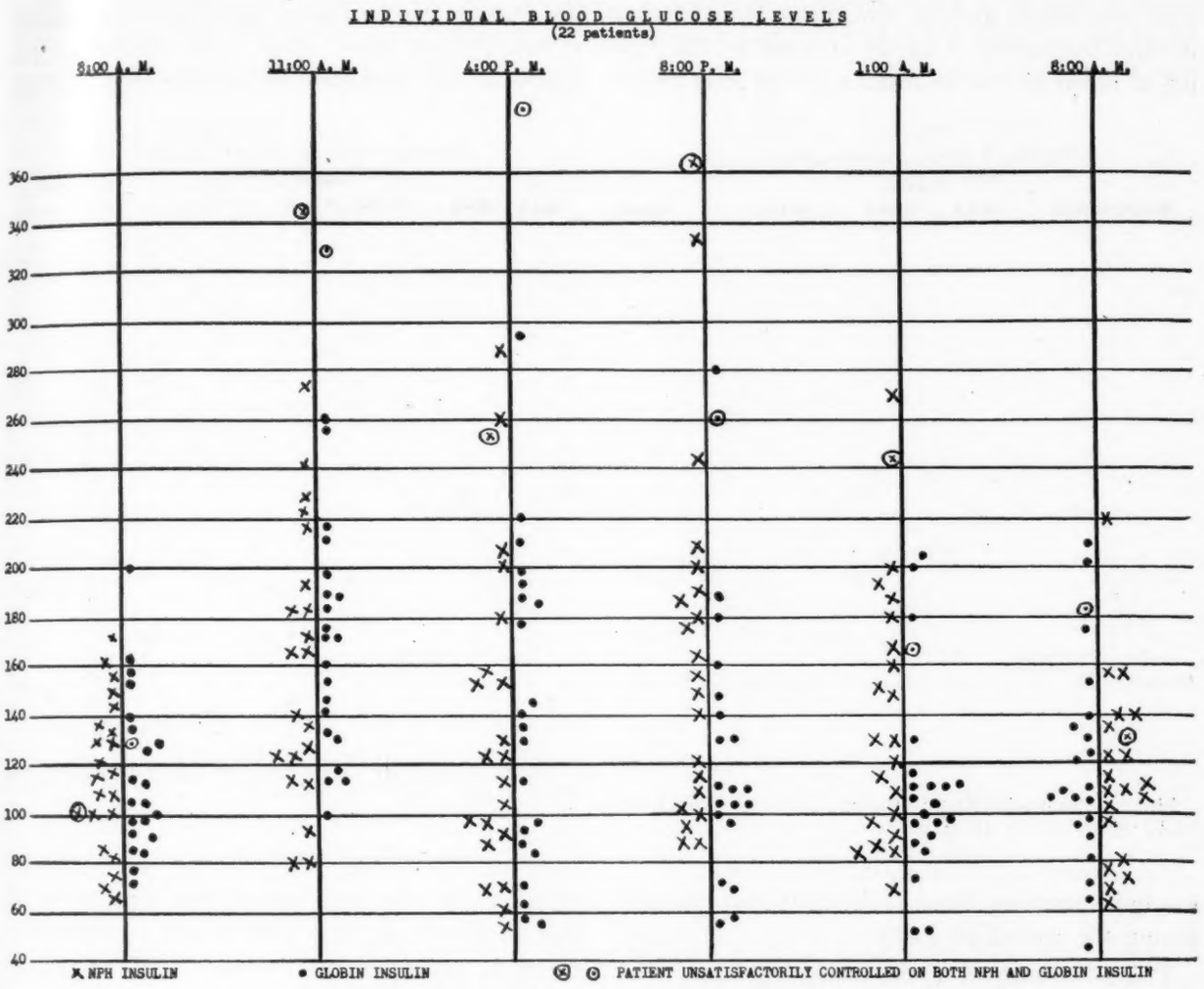


Fig. 1. Individual Blood Glucose Level (22 patients)

units daily. Patients taking less than 20 units daily can usually be standardized without difficulty on any one of the available types of insulin. Also all of our patients accepted for this series had been standardized and were on NPH insulin continuously for periods varying from two weeks to two years.

2. They were free from any condition which would complicate diabetic control such as infection, electrolytic imbalance or recent discovery of their diabetes.
3. They were hospitalized continuously for the duration of their study, and no patient once admitted to the group was dropped from statistical evaluation and report.

Method of Study

All patients in the series were hospitalized, either for this study or for treatment of a condition offering no complication to the control of diabetes mellitus. Whenever possible, the patient was kept on an ambulatory status and no attempt was made to revise his normal routine, to limit his exercise, nor to adjust his diabetic control during the study.

The patients were standardized on NPH insulin by the accepted method of standardization of the two Clinics participating in the study, i.e., a fasting blood glucose within normal limits and a 4:00 p.m. blood glucose not more than 40 mgm. above the fasting level. The patients were on diets which averaged 160 gm. carbohydrate, 80 gm. protein, and 90 gm. of fat, equally divided so far as carbohydrate, protein and fat were concerned in the three meals. While on NPH insulin, three of them also required night feedings to avoid nocturnal hypoglycemia. Immediately after the fasting blood sugar was drawn, breakfast was served at 8:00 a.m., luncheon at 12:30

p.m. and dinner at 5:30 p.m. Since the diet time in both institutions is rigidly adhered to, the timing of blood glucose in relation to the food intake was quite constant. None of the diets were changed during the period of study.

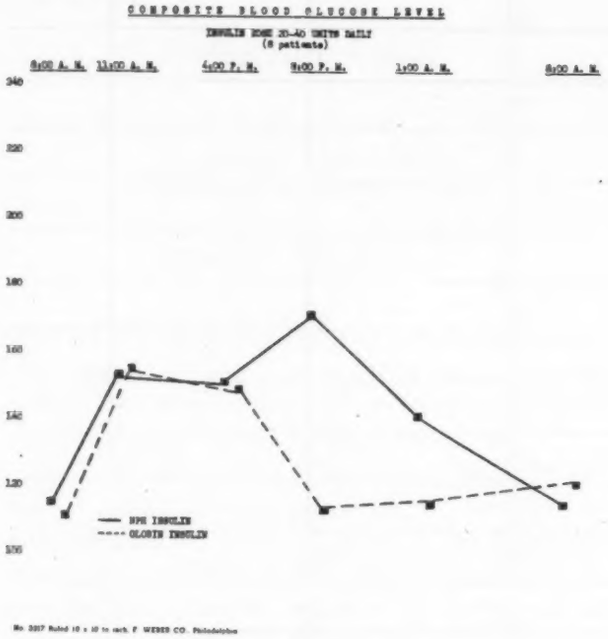


Fig. 2. Composite Blood Glucose Level (Insulin Dose 20-40 Units Daily (8 patients)

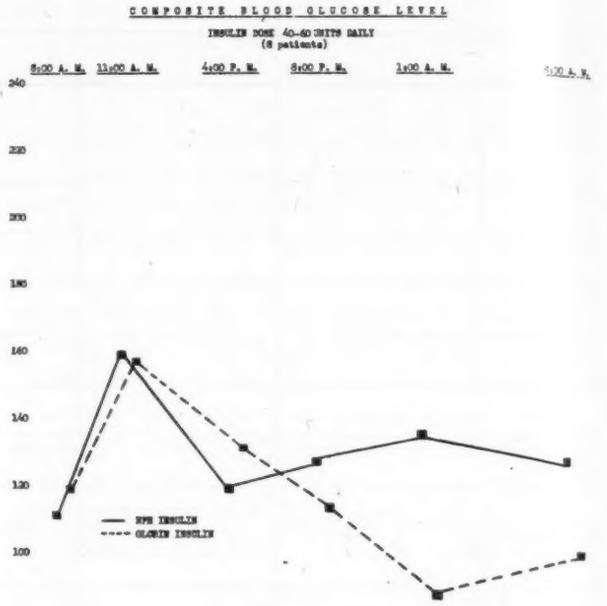


Fig. 3. Composite Blood Glucose Level (Insulin Dose 40-60 Units Daily) (8 patients)

This is in contrast to the method of Izzo,[2] who felt that adjustment of the quantity and distribution of the carbohydrate content was necessary with the various types of long-lasting insulins in order to obtain a satisfactory time action curve.

Blood glucose determinations were made on each patient at 8:00 a.m., 11:00 a.m., 4:00 p.m., 8:00 p.m., 1:00 a.m., and 8:00 a.m. the following morning. These interval blood sugars were timed to provide determinations at two fasting levels and three hours after meals, with the 8:00 p.m. and 1:00 a.m. blood sugars to evaluate the prolonged action of these two insulins through the night.

With the patient adequately controlled on NPH insulin, interval blood glucose determinations were done throughout a twenty-four-hour period. Each patient was then placed on an equal dose of globin insulin for a minimum of three days to allow adequate time for the action of the previous NPH insulin to be exhausted. Colwell and others[5] found very little evidence that NPH insulin had a sugar lowering action for more than 24 hours. Then similar interval blood glucose determinations were made. No alteration was made in the management routine and the patient was not made aware of the change in insulin. Only one such curve was run for each type of insulin on each patient and where hyperglycemia occurred with either NPH or globin insulin, no attempt was made to readjust the insulin dosage. This will account for the marked hyperglycemia on several instances in the scatter pattern (Fig. 1).

These twenty-two patients were the only cases meeting the criteria outlined above, who were admitted to our Metabolic Services during the period of the study. For purposes of the study, we arbitrarily divided them into three groups depending upon their daily insulin requirements:

Group 1. Those patients taking 20 to 40 units of insulin daily. (Fig. 2)
Group 2. Those patients taking 40 to 60 units of insulin daily. (Fig. 3)
Group 3. Those taking 60 or more units of insulin daily. (Fig. 4)

In adequate evaluation of insulin action in the control of diabetes, the importance of multiple blood glucose determinations throughout the twenty-four-hour period, and particularly from 8:00 p.m. to 8:00 a.m., is well shown in cases No. 19

and No. 21 (Table I) where standardization of these patients by fasting blood sugars alone would give the impression that either NPH or globin insulin was adequate, whereas there was actually marked hyperglycemia during the twenty-four-hour period, particularly during the first twelve hours.

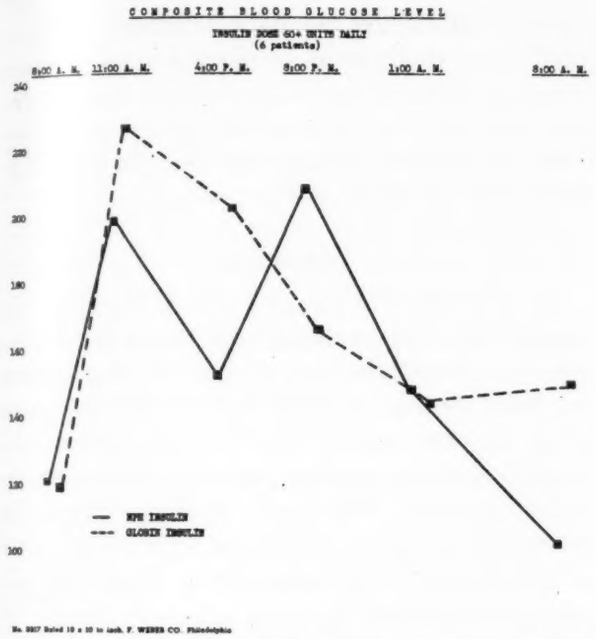


Fig. 4. Composite Blood Glucose Level (Insulin Dose 60 plus Units Daily) (6 patients)

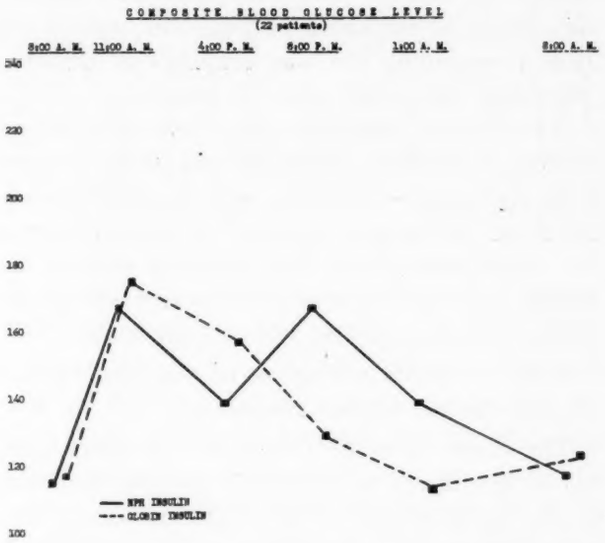


Fig. 5. Composite Blood Glucose Level (22 patients)

In Figure 5, a striking similarity in the two insulins is seen with the fasting levels being 116.5 mgm. per cent with NPH and 117.3 mgm. per cent with globin insulin. This graph shows, in our opinion, that globin insulin has a more prolonged effect than previously reported in the literature and that adequate twenty-four-hour control could be maintained in our series by either NPH or globin insulin. It is interesting also that in dividing this series into the aforementioned groups, we found little variation in the "blood sugar lowering action" of the two insulins studied in those patients requiring a larger daily dosage of insulin. This was possibly due to the fact that the insulin requirement for these patients had been previously established. They had been "controlled" diabetics for some period of time and there is some thought that the "controlled diabetics vary from the "labile" diabetics in that the "controlled" group has developed a compensatory action of their insulogenic mechanism. Endogenous insulin may be secreted or not dependent upon the degree of glycemia and thus help maintain a relatively normal blood sugar with the aid of the exogenous insulin. This is a theory, but it may

TABLE I.
INDIVIDUAL BLOOD GLUCOSE LEVELS

Patient No.	Age	Insulin Dose	8:00 A.M.	11:00 A.M.	4:00 P.M.	8:00 P.M.	1:00 A.M.	8:00 A.M.
1	45	20 NPH	134	112	131	118	147	124
		20 Globin	93	133	130	104	113	107
2	76	20 NPH	82	136	149	121	87	79
		20 Globin	98	131	94	130	88	108
3	76	20 NPH	172	228	260	200	160	158
		20 Globin	140	160	220	160	200	202
4	59	25 NPH	144	217	201	243	200	158
		25 Globin	158	191	188	140	130	141
5	72	25 NPH	75	123	154	209	180	105
		25 Globin	105	176	217	112	100	124
6	49	30 NPH	108	194	131	180	91	111
		30 Globin	85	190	140		107	110
7	76	30 NPH	66	94	60	140	85	75
		30 Globin	98	115	71	100	85	81
8	59	35 NPH	149	127	124	157	188	115
		35 Globin	115	147	135	57	97	107
9	51	40 NPH	118	166	113	150	121	114
		40 Globin	114	173	97	110	74	45
10	69	45 NPH	130	224	207	100	150	107
		45 Globin	100	173	178	148	92	99
11	56	50 NPH	108	172	92	190	110	125
		50 Globin	155	119	114	110	104	131
12	47	50 NPH	130	114	98	88	130	98
		50 Globin	72	155	145	180	110	90
13	77	50 NPH	86	182	152		270	220
		50 Globin	200	216	185	108	116	210
14	70	50 NPH	120	79	99	166	84	81
		50 Globin	76	115	59	59	52	72
15	63	50 NPH	136	165	104	110	116	140
		50 Globin	84	100	88	72	52	96
16	49	55 NPH	69	183	89	89	100	136
		55 Globin	162	217	197	131	97	65
17	59	60 NPH	100	140	54	95	130	63
		60 Globin	137	256	94	98	110	154
18	54	65 NPH	118	123	71	190	70	70
		65 Globin	90	198	62	70	99	130
19	66	65 NPH	161	240	289	335	195	140
		65 Globin	130	260	211	280	204	175
20	44	70 NPH	100	79	69	103	98	
		70 Globin	125	142	57	114	114	134
21	48	80 NPH	101	345	255	363	243	130
		80 Globin	130	327	502	260	166	203
22	57	100 NPH	157	274	180	176	168	113
		100 Globin	113	184	294	184	180	121

well explain the variations between the "labile" and those diabetics more easily controlled. However, it is not pertinent to our study as we were comparing unit for unit one insulin with another in a group of controlled patients; the type of patient representing the vast majority of diabetics physicians are called upon to treat.

The "labile" diabetics, those patients with infection or surgical conditions and those patients with electrolyte imbalance, were purposely omitted from this paper, but will be reported upon in a subsequent study. This group of patients obviously represents a very small percentage of diabetics handled by the average physician.

Figs. 2, 3, 4 and 5 bring out certain points which we feel warrant further discussion.

The charts show the dual action of NPH insulin in practically all patients, i.e., the lowering of the blood glucose level in the mid-afternoon, followed by a rise at 8:00 P.M. to 1:00 A.M. and then another drop through the night.

Globin insulin, after an initial rise in the forenoon, showed a continuous drop through the afternoon and through the evening. It is interesting that this occurred without dropping the blood glucose to the shock level even in patients taking as much as 100 units of globin in a single dose. In very few cases was there any significant rise in the blood glucose level from the 1:00 A.M. reading to the 8:00 A.M. reading. In the vast majority of patients the 8:00 P.M., 1:00 A.M. and 8:00 A.M. blood glucose determinations were lower than the 4:00 P.M. reading. The difference in the 11:00 A.M. and 4:00 P.M. readings was not very significant except in the group taking more than 60 units of insulin a day, but this group showed a continuous and satisfactory drop from 4:00 P.M. until the fasting level the next morning. We feel it is of significance also to note in Fig. 1, there is seen a more uniform grouping of the blood glucose determinations with globin than with NPH insulin with fewer high levels and only a minority of low blood glucose readings.

It would seem, from these comparative studies under identical conditions, that the twenty-four-hour action of globin insulin was established as being equal to that of NPH in a group of patients who, we felt, were adequately standardized. This is somewhat at variance with the opinion one obtains from the literature. Mosenthal[3] states that globin insulin has a blood sugar lowering action of twelve to eighteen hours duration and on the basis of this many physicians have given globin insulin twice daily in the standardization of many cases.

Conclusion

In an attempt to compare the action of globin insulin and NPH insulin, twenty-two patients were studied. They had been previously standardized on NPH insulin as their only insulin for two weeks to two years. They were admitted to the hospital and a twenty-four-hour blood glucose curve obtained. They were then placed on the same dose of globin insulin for three days, after which another twenty-four-hour blood glucose curve was obtained.

It was our experience that there was no appreciable difference in control of the diabetes in the action of these two insulins at the end of the twenty-four-hour period. This is true of patients taking doses of insulin varying from 20 to 100 units daily in a single dose. It would seem that globin and NPH insulin might give approximately the same degree of diabetic control and the insulin of choice should be determined by the physician's experience and the individual's response.

Bibliography

1. American Medical Association: Council on Pharmacy and Chemistry. J.A.M.A., 148:373 (Feb. 2) 1952.
2. Izzo, J. L., and Crump, S. L.: Clinical comparison of modified insulins. J. Clin. Investigation, 29: 1514-1527 (Nov.) 1950.
3. Mosenthal, H. O.: Management of diabetes mellitus. Ann. Int. Med., 29:79, 1948.
4. Peck, F. B.: Progress in Clinical Endocrinology. Pp. 307-312. New York: Grune and Stratton, 1950.
5. Rohr, J. H., and Colwell, A. R.: Comparison of intermediate insulin. Proc. Am. Diabetes A., 8:39, 1948.
6. Sugar, S. F. N., and Alpert, L. K.: Clinical comparison of intermediate insulins in the control of severe diabetes. Abst., American Federation of Clinical Research. Am. J. Med., 11:516, 1951.

Diabetes Starting in Childhood

By William M. LeFevre, M.D.
Muskegon, Michigan

FOR THE past thirty years, insulin has been used in the treatment of diabetics both young and old. It seems pertinent at this time to attempt to evaluate the results of this treatment, with particular attention to the childhood type.

This study will deal with sixty cases of diabetes with the onset between ages sixteen months and eighteen years and will show that good dietary and insulin control pays out in the long run.

All of the sixty cases were treated for most of their diabetic life in my office. Some of them were hospitalized at the start because of the severity of the condition or the inability of the parents to learn the routine of diet and insulin therapy soon enough to establish control promptly.

The diets used in these cases are all computed as to normal height and weight for the age, and were weighed for accuracy. The protein content was kept up to 1½ to 2 gm. per kilo per day in the young group and gradually reduced to 1 gm. at age twenty. This was not true in the case of those treated before 1930 when it was the accepted practice to feed less protein. This pertains to only two of these cases. The carbohydrate content ranged between 140 and 180 gm. and the fat content 90 to 110 gm. per day.

Since the diets for childhood diabetics are usually prepared by the mother, she was fully instructed in each instance on the abnormal physiology of the disease, the principles of diet management, methods of substitution, and accurate weighing. As soon as the child reached an age where instruction was practical, then the child was taught to care for his own diet, with careful supervision by the mother.

Insulin therapy was started at the onset and was used in sufficient amounts to keep the 11 A.M. blood sugar at a point between 110 to 140 mgm. per cent. The urine tests were done at intervals and at various times during the day. If it was apparent that adequate control was not being attained, then twenty-four-hour blood sugar curves were done to help in readjusting the dosage to insure as nearly a level curve as possible throughout the day and night.

TABLE I.

Age at Onset	No.	Sex		Age		Deaths		Rating on Physical Condition			
		M	F	Av.	Oldest	No.	Age	I	II	III	IV
Und. 2 yrs.	4	3	1	14	30	0		3	1		
2- 4	3	1	2	22	24	0		2	1		
4- 6	3	1	2	10	12	1	8	1	1		1
6- 8	6	4	2	21	26	1	25	2	3		1
8-10	10	4	6	17	27	1	13	6	1	2	1
10-12	8	4	4	19	28	1	17	5	1	1	1
12-14	8	3	5	18	27	1	15	6		1	1
14-16	11	5	6	26	37	2	29	6		3	2
16-18	7	6	1	29	46	0		3	2	2	
Total	60	32	28	20.5	46	7		34	10	9	7

In those cases treated from 1924 until the advent of the slow acting insulins, unmodified insulin was used in either three or four injections daily. Since then Protamine Zinc and unmodified insulin combinations have been used, either in separate injection or in a mixture of one part Protamine Zinc to two parts of unmodified insulin. A few cases have been adjusted on ratios other than one to two in order to maintain a more level twenty-four-hour curve. In the past few years, NPH insulin has been substituted for the Protamine Zinc and regular mixtures in some cases.

The children were examined at my office each month and were watched for evidence of complications and childhood diseases. These frequent visits to the physician played a large part in the successful outcome of many of the cases. Church attendance on Sunday strengthens the resistance against sin the rest of the week; in like manner, these frequent visits to the physician helped to keep them on the straight and narrow dietary path.

Degree of Achievement of Successful Management

No diabetic routine in childhood can be successful without good cooperation between the mother, the patient and the doctor. My experience is no different from that found by other doctors. Many mothers are careless and indifferent to the welfare of the child. Many of them have large families and are too busy to watch the child properly. Many do not have the intelligence necessary to properly carry on the treatment. So for these several reasons, many children do not have the benefit of good control and many of the vascular complications in later life are due to this lack of cooperation in the home.

TABLE II.

Control Rating	No. Cases	Avg. Years on Insulin	Age at Onset			Sex		Present Rating Physical Cond.			
			Avg.	Youngest	Oldest	M	F	I	II	III	IV
Under Five Years on Insulin											
A	12	1.6	11.7	21 mo.	14	5	7	12			
B	1	3	18	18	18	1	0	1			
C	5	3.2	12.4	5	16	3	2	1	1	1	2
Total	18	2.4	12.4	21 mo.	18	9	9	14	1	1	2
5 to 10 Years on Insulin											
A	7	6	12	4.6	16	2	5	6			1
B	3	7.7	7	1.3	13	2	1	2	1		
C	4	7	10	4	11.5	4	0		2		2
Total	14	6.6	10.1	4	16	8	6	8	3		3
10 to 15 Years on Insulin											
A	3	12	6	2	9	1	3	3			
B	3	11	9	8	10	1	2	1	1	1	
C	6	10.7	13	6	18	3	2	1	1	4	
Total	12	11	10.2	2	18	5	7	5	2	5	
15 to 20 Years on Insulin											
A	3	17	12.7	10	15	1	2	3			
B	2	18	8	2	14		2	1			1
C	3	18.7	6	3	9	3				2	1
Total	8	18	9	2	15	4	4	4		2	2
20 Years and Over on Insulin											
A	4	22	10	3	16	3	1	3	1		
B	2	27	9.4	1.8	17	1	1		2		
C	2	22	8	6	10	2	0		1	1	
Total	8	24	9.2	1.8	17	6	2	3	4	1	
All Groups											
A	29	8	10.9	1.7	16	12	18	27	1		1
B	11	12	9	1.3	18	5	6	5	4	1	1
C	20	10.4	10.7	3	18	15	4	2	5	8	5
Total	60	9.6	10.5	1.3	18	32	28	34	10	9	7

We have another problem which is difficult to handle (Table I). It became apparent during this survey that when the diabetes started under ten years of age, much better cooperation was obtained from the child. They obeyed better and seldom rebelled against the routine. The diabetic child of twelve to eighteen years of age is apt to become too independent and careless with the treatment. This problem requires painstaking effort on the part of both the physician and the mother to keep the child conscious of the seriousness of inadequate control. It is too bad some method cannot be devised to impress the parent and child that once retinal changes have taken place, no degree of adequate control can reverse the process, and blindness is inevitable.

However, I do not want to create the impression that this pessimistic situation is the rule. By far, the majority of the cases are controlled in homes where cooperation is maintained at a high level. Their blood tests are done regularly and when visits to the physician at regular intervals are not possible, frequent urine tests are run. Their diets are prepared and measured with the greatest of care. It is these patients who live on for years without evidence of vascular disease.

Evaluation of Results

In this study (Table II) the degree of diabetic control was based on the results of frequent check-up examinations and a careful observation of the home life and diligence of the mother and child. When careful supervision of the diet and insulin therapy was obvious, the visits to the office for examination were frequent and hyperglycemia was not present except during short periods of infectious or childhood diseases, the case was given a control rating of "A" (Table II). When the supervision in the home had been only fair, with periods of carelessness resulting in hyperglycemia, even though a return to good control took place after several months, the case was rated as "B." When there was a total disregard for the dietary and therapeutic instructions over periods of months and years, with only short periods of careful management, the case was rated as "C."

The cases have been rated also as to the physical condition at the time of the survey. A rating of I (Table II) was given to those cases showing no evidence of vascular disease, either retinal, peripheral or renal. As far as has been possible, they have been checked by ophthalmoscopic examination, palpation of peripheral vessels, x-rays, as well as urinalysis and blood nitrogen. A rating of II was given to those cases where there was no evidence of vascular pathology, but other complications appeared such as pulmonary tuberculosis, rheumatic heart disease, dwarfism, et cetera. A rating of III was given to those cases showing definite evidence of either retinal, renal or peripheral vascular disease. Those who died were classified as IV.

During the first few years of diabetic management, it is seldom that vascular pathology appears, even those patients who are obviously poorly controlled may go for years without vessel lesions. Eighteen cases in the first group in Table II have been on insulin for an average of 2.4 years. Fourteen of the eighteen have remained free from complications. The two deaths and the two with complications were definitely due to poor control with careless routine on the part of the parents.

Eight of the fourteen cases in the second group (Table II), with an average of 6.6 years on insulin, have shown no evidence of vascular disease, but three have complications attributable in one way or another to their poorly controlled diabetes and three have died. The deaths will be discussed later.

As the years of diabetic life lengthen, we begin to see more evidence of the effect of poor control. In the third (Table II) group, with an average of eleven years on treatment, seven out of twelve have already begun to show vascular or other complications. It often takes a number of years of relatively poor control for the vessels to degenerate and a reversal of this process is seldom, if ever, seen.

In the fourth group, consisting of cases under treatment for over fifteen years, there are eight cases averaging eighteen years on insulin. Four of them are still free from complications, even though one of the four was not too careful in following dietary instructions. Two of the other four have already developed serious complications and two have died.

In the last group there are eight patients who have been on treatment for an average of twenty-four years. Three of the eight have been very faithful to their routine and still show no obvious vascular changes, while the other five have developed complications.

A long term study of this nature cannot help but show that evaluation of the efficacy of a method of diabetic control on a few years of observation is not conclusive and is liable to lead one to draw false conclusions. Many diabetics on a carelessly measured diet or no diet at all, showing small amounts of sugar rather consistently, have continued to feel well and appear in good health for as much as fifteen years. However, very few cases so indifferently controlled pass the twenty year mark without serious complications, usually vascular.

An interesting fact was brought out by the study. Of the twenty-eight female patients in the list, seven became pregnant and were delivered of normal children. Control of the disease during the pregnancy was easily accomplished but more frequent examinations were conducted during the period of gestation. Only one of the seven was unsuccessful from the mother standpoint. She developed post-partum convulsions and died two days after delivery.

TABLE III.

No.	Sex	Age Onset	Yrs. on Ins.	Rate of Control	Cause of Death
1	M	15	9	C	Strep. Infection. Coma
2	F	14	19	A	Calcification of arteries at 26. Died of nephritis.
3	F	8	5	A	Influenza—Coma. Possible potass. def.
4	F	5	3	C	Mother regulated control without medical guidance. Lobar pneumonia.
5	M	6	19	C	Nephritis. Possible Kimmelstiel-Wilson.
6	M	12	3	C	Absolute disregard for diet—Coma Possible potass. deficiency.
7	F	11½	6	C	Poor control. Pregnancy. Post-partum convulsions.

Causes of Death

The seven deaths are listed in Table III and are selfexplanatory. Potassium deficiency was probably a factor in two of them, one long before that factor was recognized and the other due to insufficient potassium therapy. It is most likely that a better control during the previously existing diabetes would have allowed better results from the coma therapy in five of the seven cases.

Conclusions

It is possible to obtain good diabetic control in childhood diabetes only by careful and proper instruction of the mother and patient and frequent check-up examinations of the blood and urine.

Vascular lesions as diabetes complications are the result, in most cases, of poor or inadequate control early in the disease.

Bibliography

1. Dolger, H.: Clinical evaluation of vascular damage in diabetes mellitus. J.A.M.A., 134:1289, 1947.
2. Jackson, R. L., et al: Degenerative changes in young diabetics in relation to level of control. Proc. Am. Diabetes A., 9:307, 1949.
3. Wagener, H. P.: Retinopathy in diabetes mellitus. Proc. Am. Diabetes A. 5:203, 1945.

Diabetes Detection

By George C. Thosteson, M.D.
Detroit, Michigan

MODERN MEDICINE has added much to the comfort and longevity of patients with diabetes mellitus. Prompt and adequate treatment can prevent or modify many complications of diabetes. Diabetes detection is therefore important. Approximately 2 per cent of the population has known diabetes. Recent surveys,[2] sampling 60 to 70 per cent of a given area, reveal the astonishing fact that for every four known diabetics, three new cases were discovered. A large portion of the population therefore has undetected diabetes mellitus. One reason for this is that diabetes, particularly in the older age groups, is insidious in its onset and subtle in its manifestations. A detectable chemical imbalance will exist long before the individual realizes he is ill. Most diabetics are discovered accidentally in the course of routine physical, employment or insurance examinations when the urine is tested for sugar. Urine is the easiest of body fluids to obtain; the test can be performed in less than five minutes for a cost of less than five cents. Any degree of positivity should create suspicion of diabetes and should be confirmed by appropriate blood sugar studies.

A concerted diabetes detection effort is being sponsored by the American Diabetes Association—the fifth annual program this year will be during the week of Novmber sixteen to twenty-two. Many physicians are annoyed by such special disease programs. The story is different, however, for the person found to have a disease as a result of these efforts be it diabetes, cancer, tuberculosis or others. The impetus of such programs is far-reaching. The profession is alerted to the intelligent use of detection tools. The public is educated as to the nature and potentialities of detectible chronic disease; and the known sufferers of a disease, especially diabetes, are stimulated to better coöperation with their physicians. Too often there is a laissez faire attitude toward a mild glycosuria on the part of physicians and a passive neglect of a mild diabetes by the patient until ketosis, gangrene or blindness result.

Diabetes detection is not a one-week affair, however. The program of the American Diabetes Association in coöperation with state and county societies is a perennial reminder that diabetes mellitus is ubiquitous and insidious and should be constantly looked for. The detection program throughout the country assumes various degrees of activity and effort. No single pattern is applicable to all communities. The program is dignified by being conducted and controlled by doctors of medicine without solicitation of funds for the effort. To this end it is an excellent public relations project. Financing has been at the state or county level by the societies, through health departments or voluntary contributions. The physician's office is the best detection center. Some areas rely solely on publicity regarding the nature of diabetes and urge people to consult their physicians. Others have elaborate displays and facilities for testing urine and blood for sugar. In these instances no pretense is made of making a diagnosis of diabetes but the person with suspicious findings is referred back to his physician for definitive diagnosis.

Continuous screening of large segments of the population can be carried out subtly in other ways. Among these are camp and school examinations of children which should include a urinalysis. Although diabetes in the young age group is usually abrupt in onset, occasionally a case is picked up in this way. Recently among 1,900 students screened in one Detroit high school, three new diabetics were discovered. Another method is through employment and periodic physical examinations of industrial groups. Most large concerns have well integrated medical departments where urine testing is routine. Many have facilities for blood sugar follow-up on positive reactors. Examiners for some small plants, however, fail to test the urine, the examination being confined to the heart, blood pressure and presence of hernia. A majority of women as housewives will not fall in the above categories and must be tested by their physician or at centers when available. The sex incidence of diabetes rises to 6.1 over fifty years of age with women in predominance. Women's auxiliaries, service clubs and farm groups can serve well in stimulating interest in diabetes detection programs.

The detection of diabetes necessarily becomes the function of the private physician. Through the stimulus of the American Diabetes Association state medical societies have formed diabetes committees (in Michigan it is a subcommittee of the Geriatric Committee). In turn county societies are urged to form committees at the local level for

educational and detection purposes. In 1951 there were thirty state society committees and 636 county society committees throughout the country. In Michigan forty-two county societies (approximately 50 per cent of the state) had diabetes committees. This number has increased rapidly in the past five years indicating the impact of the national program and the growing appreciation on the part of the profession of its significance. A wholesome liaison exists with state, county and local health departments which is important.

The tools of diabetes detection are relatively simple and generally available: these are urine and blood analyses for sugar. Two fallacies exist which should be overcome from the standpoint of accuracy and expense. First of these is reliance on the early morning urine sample. This is routine procedure in many offices and hospitals. A fasting urine negative for sugar does not rule out diabetes since many mild diabetics "spill" only late in the day or after meals. Hence urine collected two hours after a meal rich in carbohydrates will be more significant. Glycosuria of any degree then should be confirmed by blood sugar estimates. If time or cost precludes a standard glucose tolerance test, a blood sample may be drawn an hour and a half or two hours after a meal high in carbohydrates. A sugar level of over 170 mg. per cent at this time is strongly suggestive of diabetes. The technique of self-testing has been analyzed and leaves much to be desired.[1] Of those who received the kits 60 per cent used them. Those who participated most accurately did so out of fear of the disease or knowledge of it in the family. Six per cent had positive findings, yet only one quarter of these sought the advice of their doctors in accordance with directions.

The second fallacy, a corollary of the first, arises in dependence on the fasting blood sugar. As a routine hospital and office procedure it is too often a waste of time, talent and money. As a guide to insulin therapy or in the diagnosis of islet cell tumor it is of value. A fasting level of over 130 mg. per cent is suggestive of diabetes; with an associated glycosuria it is diagnostic. This is often not the case with mild or early diabetes wherein the postprandial blood samples are much more significant. Too, the after meal blood sugar will spot the "high threshold" individual whose after-meal urine may be negative for sugar.

Blood level values suggested by the American Diabetes Association as highly probable of diabetes are as follows:

Venous blood: Folin-Wu method—
over 130 mg. fasting.
over 200 mg. after meal.

Somogyi (true glucose)—
over 110 fasting.
over 150 mg. after meal.

Capillary blood: Folin-Ralmos method—
over 140 mg. fasting.
over 240 mg. after meal.

True glucose—
over 120 mg. after fasting.
over 200 mg. after meal.

A simple kit is now available which tests capillary (finger) blood for true glucose at two levels, one at 130 mg., the other at 180 mg. The test requires about five minutes time and precludes the more elaborate techniques of standard blood sugar methods. Its accuracy has been established.

Diabetes knows no sex or age limitations. In children it is prone to appear around puberty. In women, pregnancy may be a precipitating cause. All glycosurias of pregnancy should be checked with blood sugars. Women who have borne large babies seem particularly prone to diabetes later. Obesity is present in 80 per cent of most diabetics. The duration of the obesity is important, thus individuals who have been too fat too long are likely candidates for the disease. The hereditary aspect, as a recessive characteristic, is generally accepted. Hence blood relatives of diabetics deserve watching. Parents of diabetic children and children with a diabetic parent will wisely be tested for sugar periodically. Tangently, diabetes in cousins, aunts and uncles may be a clue of the trait in the family heredity.

The following five brief histories illustrate some of the above points:

Case 1.—K. J., a gas station attendant, age 20: Glycosuria discovered in June, 1949, after 30 lb. weight loss in 3 months; thirst, frequency and weakness. Fasting blood sugar 250 mg. with 4 plus urine sugar. Weight in Aug., 1949—135 lbs., in June, 1950, 150 lbs. Fasting blood sugar in June, 1950, 138 mg. on 42 units of mixed insulins; 106 mg. on 38 units NPH in June, 1952 (illustrates early onset, classical symptoms, good response).

Case 2.—R. H., dentist, age 60. Family history: paternal uncle died in diabetic coma; cousin has diabetes; mother, age 80, has diabetes; brother, age 53, has coronary disease and diabetes. Had easy fatigue since virus

pneumonia in 1947. No thirst or frequency. Weight in March, 1948—186 lbs., urine negative at breakfast and supper, trace at lunch. Tolerance test:

Blood:				
F. 112	¾ hr 294	1½ hr 294	2½ hr 270	3½ hr 147 mg.
Urine:				
neg.	4 plus	4 plus	4 plus	4 plus

On a reduction diet, in April, 1949, weight 178 lbs., blood sugar three hours after meal—101 mg. Active, strong. (Emphasizes strong family history, role of overweight, significance of only a trace of sugar and the fallacy of relying on fasting sugar (112) for diagnosis of diabetes.)

Case *3.*—A. R., physician, age 50: Glycosuria found at insurance examination in April, 1948. Blood sugar three hours after meal was 160 mg. No symptoms, negative family history, weight 197 lbs. Tolerance test:

Blood:	F. 178	1 hr 310	2 hr 310	3 hr 206 mg.
Urine:	neg.	2 plus	2 plus	2 plus

On 1200 calorie diet. In April, 1949, weight 170 lbs., blood sugar two and one half hours after meal—104 mg. (Absence of symptoms, casual discovery, negative fasting urine with high fasting blood sugar, obesity.)

Case 4.—H. M., executive secretary, age 40: In 1942 on routine examination weight was 183 lbs. (excessive for build), fasting urine negative, after supper urine presented trace of sugar. 1945 mid-day urine was negative. In March, 1948, weight 184 lbs., complained of dysuria. Balanitis present, urine 4 plus sugar, fasting blood sugar 141 mg. Father had recently developed diabetes. Weight dropped and symptoms cleared on diet. June, 1948, weight 165 lbs., blood sugar one and one half hours after meal—143 mg. (Lapse of six years before symptoms brought patient back for investigation. With overweight in 1942 and trace of sugar and abnormal tolerance test might well have been obtained had proper investigation been pressed.)

Case 5.—C. R., motor executive, age 52: Son developed diabetes so patient consulted company medical director, tolerance test done:

Blood:	F. 125	½ hr 22	1 hr 270	2 hr 196 mg.
Urine:	neg.	trace	4 plus	4 plus

Sister had diabetes. Patient had series of boils in May, 1949. Cholesterol—340 mg. Dietary restriction produced negative urine with after meal sugar of 119 mg. Business pressure demanded rapid pace and excessive drinking. Patient expired suddenly of heart disease in December, 1949. (Role of family history with offspring manifesting diabetes before it was apparent in the parent; arteriosclerotic heart disease with its sudden termination undoubtedly fostered by co-existent diabetes.)

Summary

Diabetes mellitus is more prevalent than it has been assumed to be. Group screening will detect the unsuspected case of diabetes. Diabetes can be detected readily if kept in mind and when looked for in the obese, when there is family history of the disease and when all instances of glycosuria are thoroughly investigated. Prompt diagnosis and proper treatment will keep the diabetic economically active and physically well.

Bibliography

1. Getting, V. A.: Root, Wilkerson, Lombard and Cass, Diabetes, 1:3; 194-200.
2. Wilkerson, H. L. C.: Proc. Am. Diabetes A., 7: 187-214, 1947.

1139 David Whitney Bldg.

PROFESSIONS SHOW RISE IN EARNINGS

The average physician last year earned $12,518 or $980 more than in 1950. The average lawyer made $9,375, or $303 more than in 1950, and the average dentist, $7,743, or $450 more.

These figures, made public today by the Office of Business Economics of the Commerce Department, are based on recent mail surveys of the three professions. They are the average earnings, *before taxes,* of physicians, lawyers and dentists regardless of whether they were independent or salaried practitioners.

A breakdown of the figures showed, however, that as in the past, the independent physicians fared better than those on salary. The average net income of the independent physician in 1951 was $13,378, while the salaried members of the profession made $9,522. Of an estimated 175,000 physicians, about 38,500 are salaried.

It was the other way around with the legal profession, however, with the salaried lawyers earning on an average about $10,197 and the independent ones making $8,936. Salaried lawyers represent about 35 per cent, or 73,500 of an estimated 210,000 attorneys in the country.

While the report showed that the average independent dentist made $7,856 last year, it said that there were too few returns from the salaried dentists to permit estimates. According to the Bureau of Census, the country has about 77,000 dentists.

The report noted that from 1949 to 1951, incomes of physicians (independent and salaried) rose 13 per cent, while dentists and lawyers reported increases of about 10 per cent.—*New York Times,* July 23, 1952.

The Implications of Diabetes Mellitus Complicated by Pregnancy

By James B. Hurd, M.S., M.D.
Chicago, Illinois

SINCE THE advent of insulin therapy in diabetes mellitus, the problem of diabetes complicated by pregnancy has become of increasing importance. Prior to insulin therapy, few diabetics with onset before or during the childbearing age lived long enough to bear children. Moreover, those who did live either were infertile, presumably due to their poor nutritional status, or were unable to carry the increased load of pregnancy without intervening keto-acidosis. Joslin[9] reports a survey of duration of diabetes at death among 12,281 diabetics over a period of fifty-four years. The survival of the groups of diabetics of pre-childbearing and childbearing age, i.e., zero to nine, ten to nineteen, and twenty to thirty-nine years of age at onset, rose from the period 1897-1914, in which survival after onset was 1.3, 2.1 and 4.3 years respectively, to 18.8, 16.7 and 19.1 years, respectively, in the period 1944-1951. Some of the earlier students of the disease report that they had never seen a pregnant diabetic woman.[4] Recent reports indicate that the incidence of pregnancy in the diabetic woman is comparable to that in the non-diabetic.[2,15] There are an estimated 80,000 diabetic women of childbearing age in the United States at present and some 50,000 "juvenile" diabetics who are reaching or can be expected to reach the childbearing age. As the treatment of diabetes becomes progressively improved, more former juveniles will attain the childbearing age each year.

It is a recognized fact that foetal survival in the diabetic woman is less than that in the non-diabetic. Henley,[8] in a survey of the world literature to 1944, reported a foetal mortality of 37.6 per cent in 1,269 cases. Others more recently in smaller series report from 8 per cent to 70 per cent foetal mortality.[6,12,13,15] The etiology of this inability of the diabetic woman to approach the non-diabetic in foetal survival is not definitely clear. It is apparent that no one factor can explain it totally. Certainly in the pre-insulin period and even during the period in which depot insulins were unknown, a large number of foetal deaths were due to chronic poor control and malnutrition or intervening diabetic catastrophes which are now preventable by adequate control of the diabetic state.

The great majority of diabetic pregnancies that will come under the care of the physician are in patients who have already been diagnosed as diabetic prior to pregnancy. A small percentage of women will first be diagnosed as diabetic during the course of their pregnancy.[15,17] Diagnosis of diabetes during pregnancy is made by the classical procedures and criteria used in any patient. One must be cautious, as ever, not to make the diagnosis on glycosuria or reducing substance in the urine alone. Blood sugar levels and glucose tolerance tests must be employed.

One must be conscious of the natural course of diabetes in evaluating the pregnant diabetic woman. The diabetic in the course of years is subject to accelerated and premature vascular disease. This is manifested by (1) retinal vascular changes, diabetic retinopathy, microaneurysms, exudative lesions and retinitis proliferans, (2) nephropathy, Kimmelsteil-Wilson syndrome or "diabetic nephritis," and (3) peripheral vascular disease with both intimal atheromatous and medial calcific and hyaline changes, not only in the larger vessels but in the arterioles and small arteries. The factors which influence or determine the extent and severity of these changes are (1) duration of diabetes and (2) age at onset. The longer the duration, the more likely these changes are to occur. Likewise, the acceleration and rapidity of the changes are related to onset early in life. In addition, more and irrefutable evidence is being presented each year to prove that good physiological control of diabetes retards the above processes.

White[9] has developed a classification of pregnant diabetic women through experience with 702 diabetic pregnancies which is based on the above-mentioned factors. It is a sound and logical guide for prognosis and therapy. Further, it certainly should be adopted universally for evaluation and research in methods of therapy of the pregnant diabetic.

Class A includes those patients in whom the diagnosis is made only by glucose tolerance test and who require no insulin for good control.

Class B is the true diabetic with onset in adult life, i.e., one who is over twenty years of age, whose diabetes is less than ten years in duration, and who shows no evidence of vascular disease.

Class C includes onset from ten to nineteen years of age, or duration from ten to nineteen years, and no evidence of vascular disease.

Class D includes those with onset under ten years of age, duration over twenty years or those showing retinitis or calcification of vessels in legs, irrespective of age at onset or duration.

Class E covers those showing calcification in pelvic arteries by x-ray.

Class F comprises those with demonstrable vascular or diabetic nephritis.

The above classification lays emphasis upon the importance of vascular disease in the diabetic.

When one considers the effects of diabetes on pregnancy, four principal factors stand out: (1) toxemia, (2) hormone imbalance, (3) foetal oversize and (4) intrauterine death.

Toxemia or toxemia-like states are reported by most observers.[1,7,10,11,15] Toxemia may vary from mild edema and mild elevation of blood pressure, over 140 systolic and ninety diastolic with slight albuminuria, to preclampsia and actual eclampsia. The incidence of toxemia of any severity varies with the group reporting from 8 per cent to as high as 70 per cent. Reis[14] reports no greater incidence of toxemia in diabetic than in normal pregnancies. It would seem logical that hypertension, albuminuria, edema and nitrogen retention would be more common in the diabetic woman who is subject to premature vascular and renal disease. It is a well-known fact that the woman undertaking a pregnancy who has recognized preexisting renal damage, whether it be of vascular, bacterial or previous toxic origin, runs a calculated risk of toxemia-like states. The majority of toxemias in the non-diabetic occur without previous knowledge of renal damage, although it is not common to do exhaustive renal function tests routinely in early pregnancies. The diabetic thus may show, for the first time during the stress of pregnancy, manifestations of previously undiscovered renal impairment. It would also follow that duration of diabetes and age at onset would be reflected in a higher incidence of toxemia. Reis's[14] low figures for toxemia may be due to the fact that he was dealing with diabetics of short duration and with onset after childhood, i.e., Classes A and B. White's[9] high incidence of toxemia is certainly correlated with the fact that 70 per cent of her cases fall in Classes C to F. However, it must be stated that White differentiates toxemia from nephritic or essential hypertensives. All patients showing albuminuria and/or hypertension with onset past twenty-eight weeks gestation are classified as toxemias; those prior to twenty-eight weeks are classified as nephritic or essential hypertensives.

Hydramnios most certainly is a factor in many diabetic pregnancies. No two authors agree upon the incidence. White's series, the largest reported and probably the most carefully and closely followed, shows a high incidence of hydramnios. It is interesting to note that the groups reporting the lowest incidence of hydraminos are those who advocate free diet and pay little or no attention to glycosuria. One wonders if the polyuria and dehydration that must be associated with this plan of management influence the lack of hydramnios.

The incidence of spontaneous abortion in the diabetic woman also differs widely from group to group. White[9] reports a high percentage, while Reis[14] reports no increase over non-diabetics. Again as in the incidence of toxemia, the difference lies in the dissimilarity of the duration and age at onset of the two groups. Spontaneous abortion, while difficult to evaluate, must be recognized as a hazard, especially in the women falling into Classes C through F.

Intrauterine deaths past the age of viability (thirty-two weeks) are markedly increased in the diabetic. All observers agree in this and most report that over 50 per cent of the foetal deaths occur in this manner.[3,10,11,15] The etiology of this increase is not clear. Some have attributed it to maternal ketosis, others to foetal oversize, and still others to toxemia.[7,9] White[9,17] believes that it is influenced by hormone imbalance and presents rather convincing evidence that it is preventable by correction of this imbalance.

Foetal oversize is decidedly a recognized factor. Birth weight exceeding that expected for the period of gestation is noted in both live and stillborn infants. It is contributed to by three factors: (1) edema, (2) fat, and (3) visceromegaly. As will be pointed out later, it is an important factor in the selection of the mode and time of delivery.

The role played by hormonal imbalance is a highly controversial one at the present time. Smith and Smith[16] in studies on toxemia of pregnancy

reported that an imbalance of the hormonal factors influencing and associated with pregnancy was responsible for toxemia of pregnancy. White[9] in 1938 in a search for methods increasing the foetal salvage in diabetic pregnancies started an intensive study of the hormone patterns in her patients. She found that chorionic gonadotrophin levels rise abnormally and pregnanediol and estrogen levels fall below normal as pregnancy progresses. Substitution therapy with stibesterol and progesterone in increasing doses guided by serial determinations of chorionic gonadotrophin level and pregnanediol excretion, and by observation of clinical course (onset or increase of toxemia, hydramnios, et cetera) was instituted. (For details of therapy the reader is referred to Joslin's "Treatment of Diabetes Mellitus," Ninth Edition, 686-690, Lea & Febiger, Philadelphia, 1952.)

White,[9,17] in addition to classifying her cases A, B, C, D, E, and F, as described, further divided her cases into classes based on normal or abnormal hormone levels, normal untreated and treated, abnormal treated and untreated, and abnormal treated with response, i.e., correction of chorionic gonadotrophin levels and pregnanediol excretion. All patients received identical care, exclusive of hormone therapy. The comparison of results between the abnormal untreated and the abnormal treated are impressive. For the group with normal, untreated pregnancies there were 96 per cent live births; those with abnormal levels and untreated, 52 per cent live births; those with abnormal levels who were treated had 90 per cent live births. Analysis by class showed little statistical difference in A and B between treated and untreated. Class C, treated, showed 79 per cent live births, untreated 48 per cent. Class D, treated, showed 78 per cent live births, untreated 32 per cent. Class E, treated, revealed 46 per cent live births and untreated 13 per cent live births. The difference between the untreated and treated groups is apparently significant in the Classes C through F.

Others who have evaluated hormone therapy report less impressive results. Palmer, et al,[6] reported on a series of twenty-one pregnancies with 62 per cent survival. These were treated with oral stilbesterol and intramuscular progesterone in smaller doses than used by White. Keltz, et al,[10] followed thirty pregnancies, twenty-seven of which received progesteron intramuscularly and oral stilbesterol, and report a survival of 66.7 per cent. They make a number of interesting observations. In their successful group, there were ten multiparas, seven of whom had had a total of nine previous pregnancies after the onset of diabetes mellitus with only two live births. Three of the ten multiparas had a total of fifteen pregnancies prior to the onset of diabetes with twelve live births. In spite of the overall survival of only 66.7 per cent, the increase in survival rate in multiparas who had already failed to produce a live child is of value and importance. Many other reports appear in the literature that report foetal survival without hormones comparable to White's series. The majority of these deal with patients in the favorable classifications as to duration, age at onset, et cetera.

No investigator to date has attempted to duplicate White's methods of treatment, hormone evaluation, et cetera. Until this is done, one can only accept White's hypothesis. It is obvious that a co-ordinated study by many groups should be undertaken, because very few groups, and no individuals, have the volume of diabetics comparable to the White and Joslin groups. White's work is impressive and she has certainly been the most devoted and persistent student of this problem over the years.

Pregnancy has certain well-known effects on the metabolism of the non-diabetic which are amplified, and are factors to be contended with, in the diabetic. The "renal threshold" for sugar is reduced so that glycosuria occurs at much lower blood sugar levels. This is important, in that, if this is not recognized and control is based on glycosuria without benefit of close supervision of blood sugar, insulin reactions may result from overdose of this drug. It is also important when it is realized that with a lowered threshold the patient may spill large quantities of glucose up to 50-70 per cent of daily intake. When this occurs, ketosis is likely to occur. There is a markedly increased tendency to ketosis in pregnancy under any circumstance and this is magnified, of course, by the diabetic state.

Pregnancy may bring to the surface clinically unrecognized renal disease and it may accelerate pre-existing renal disease. Urinary infections, of course, are more common in pregnancy. All of these should be watched for and evaluated by frequent urinalysis, blood chemistries and physical examination. It is generally agreed that maternal

mortality is low and is not a factor to consider if the diabetic is carefully controlled and watched throughout her pregnancy.

Therapeutic abortion should never be done because of diabetes alone. Therapeutic abortion is justified in the following instances: (1) severe retinitis, (2) diabetic nephritis with constant daily albuminuria, nitrogen retention and/or hypertension, and (3) chronic recurrent urinary infection with diabetic nephritis of any degree.

Management

The management of a successful diabetic pregnancy requires the intimate co-operation of the internist, obstetrician and pediatrician. The internist and obstetrician should work in close association during the course of the pregnancy; the pediatrician assumes a major role at the time of delivery in the special care of the infant.

Upon undertaking the responsibility of the care of a pregnant diabetic, the physician, at the beginning, must do two things. He should discuss the necessary care and added inconveniences over and above the routine adequate day-to-day control of diabetes with the patient and her husband. The increased incidence of fetal loss coincident with diabetic pregnancy should be pointed out, not in an "alarmist" vein, but as a means of better understanding on the part of the patient, the reasons for the added care and "inconveniences" clearly explained. Next, the patient should be evaluated as to duration of diabetes, age at onset, presence of vascular and renal complications and success or failure of previous pregnancies, both prior to and following the onset of diabetes mellitus, along with details of treatment and complications, if any. Needless to say, all the factors and evaluation common in good routine obstetrical care should be checked.

X-ray studies of legs, pelvis, chest and abdomen should be done to determine presence of vascular calcification. Fundoscopy by a competent individual with careful search for evidence of vascular change and retinopathy is essential. Evaluation of the renal function should include routine complete urinalysis, non-protein nitrogen creatinine, phenolsulfon phthalein excretion, concentration-dilution test and total protein-A:G ratio. Further renal studies such as intravenous pyelography and even retrograde pyelography should be done if indicated. Adequacy of diabetic control should be investigated by blood glucose levels, fractional qualitative urine glucose tests and twenty-four-hour quantitative urine glucose determinations. Any remedial condition such as urinary infection or dental infection should be treated immediately.

Diabetic management should be carefully handled. Adequate chemical and clinical control should be maintained at all times. The aim of control should be minimal glycosuria with as close to normal blood sugars compatible with freedom from frequent mild insulin reactions or occasional severe insulin reactions.

Diet should be measured or weighed and adjusted to conform with the needs of both diabetes and pregnancy. Caloric intake should be adjusted to weight requirements. Thirty calories per kilogram of increasing body weight should be used. This figure can be raised or lowered depending on need for weight loss or gain. Weight gain of over twenty pounds if not due to fluid retention should be handled by caloric restriction. Protein levels of two gm. per kilogram of body weight are desirable. Carbohydrate should not be below 150 gm. and not above 250 gm. Fat is used to complete the caloric prescription. Carbohydrate should be enough to allow for 960 gm. of milk per day. Reduction in calories can be accomplished by reduction of fat. Skimmed milk as a substitute for whole milk will reduce the caloric intake by 300 calories.

The fact that the majority of pregnancies are in young adult or juvenile diabetics means that the majority will need insulin. As with juvenile and young adult diabetics in the non-pregnant state, "intermediate" insulins such as N.P.H. or mixtures of protamine zinc insulin and regular insulin are most efficient for control. Most patients can be successfully controlled with one daily dose each morning. Supplemental regular insulin before each meal may be necessary to control excessive postprandial hyperglycemia and glycosuria. As stated before, the physiological lowering of renal threshold may cause increasing excretion of glucose up to 50-100 gm in 24 hours. When glucose utilization falls below 100 gm. in 24 hours, ketosis occurs easily. Thus, in addition to qualitative urine tests two to four times per day, routine twenty-four-hour quantitative urine glucose should be done at least every two weeks, oftener if excessive glycosuria is suspected. The patient should also perform a "spot" test for acetone daily. It is the rule and not the exception that insulin requirements increase during pregnancy, providing nothing interferes with normal dietary intake. Many

patients' insulin requirements drop sharply, even below pregnancy levels, following delivery. This observed fact is difficult to explain. It is postulated that it may be due to sudden decrease in pituitary activity or even to withdrawal of placenta-produced ACTH.

Hormone therapy as a tool in prevention of toxemia and foetal deaths is, as stated above, still a very controversial subject. At the present time the methods for control and the materials recommended by White are of such magnitude of cost that it is not feasible to suggest hormone therapy on a universal basis. Women coming under Classes A and B need no hormones. Those judged to lie in Classes C and D should be further evaluated by the physician charged with their care. Past obstetrical history is a determining factor. Failures to obtain live births in the past, following the onset of diabetes mellitus, should be carefully screened. If no specific cause remediable by usual care is apparent and if it seems that toxemia, hydramnios and late intrauterine death was present, hormone therapy should be considered. This is particularly true if the patient is in Classes C through F. Again the patient and husband should be acquainted with the probabilities of foetal death in late gestation. The increased inconveniences and cost of therapy should be weighed carefully against the desire for a child and the probabilities of foetal loss. If, as in most localities, hormone assays are not available, the schedule advocated by White[9] should be followed, i.e., daily doses of stilbesterol and progesterone intramuscularly, with increasing dosage each month. Increasing dosage in advance of the timetable set up should be based on clinical evaluation. The next higher dose level should be instituted if evidence of toxemia or hydraminos appears.

In view of the high incidence of *in utero* deaths during the last four to six weeks of gestation, the following precautions are of major importance:

1. All patients in Classes C through F should be hospitalized one to two weeks prior to the expected delivery date. In this manner the patient is at partial rest and can be carefully watched from day to day.
2. Timing of delivery date is made on the classification. Class A should be allowed to go to normal term, Classes B and C to thirty-eight weeks, Classes D and E to the thirty-sixth week if there is no toxemia, increasing evidence of renal damage, foetal halo by x-ray, or gross recognizable foetal oversize. Emergency delivery once the foetus is past the date of viability should be done for the following: (1) pre-eclampsia, (2) hydraminos, (3) foetal halo and (4) sudden loss of foetal movement while heart tones stay audible.

Obstetrical judgment will determine the type of delivery. If, at the time selected, the patient's cervix is favorable, induction of labor by rupture of the membranes is attempted. A trial of labor is given. If the progress is not satisfactory, a caesarean section should be done. Prolonged labor is not well tolerated by either the foetus or its diabetic mother. Even the slightest suspicion of dystocia should interdict pelvic delivery. During labor sedation should be kept at the lowest levels possible. Low spinal or local block are the anesthesias of choice.

Diabetic control prior and postoperatively in caesarean sections should be carried out with the patient under six hour emergency management as described by Colwell.[5] Starting just prior to surgery, 1,000 cc. of 10 per cent dextrose in distilled water should be given slowly, intravenously. This prevents any possible maternal hypoglycemia.

Immediate post-natal care of the newborn is of utmost importance. One must realize that even though the infant may appear mature physically it is immature chronologically and may be expected to react as a premature infant. The pediatrician is part of the team that is present at the time of delivery. The infant is passed immediately to him. A number ten soft rubber catheter is used to aspirate the mouth, pharynx and stomach of the infant. All possible sources of material that could be aspirated are removed. The infant is then placed immediately in a heated incubator with oxygen running constantly at 7 liters per minute. Hypoglycemia in the infant is an uncommon occurrence. However, one should be on the alert for the rare cases in which it does occur. The common manifestations of hypoglycemia are restlessness, extreme irritability, marked increase in suckling reflex and high-pitched hunger cry. This may be treated by administration of 50 per cent glucose solution orally with an eye-dropper. Foetal edema when present should be treated by restriction of fluid intake in the first twenty-four to forty-eight hours. All feeding other than repeated small amounts of 50 per cent glucose should be withheld. This will often result in a weight loss of one pound or more

in the first two days. Following this, a 2 per cent milk formula or breast milk may be started. It has been observed that the average diabetic mother cannot breast feed her infant adequately; thus formula feeding is advised.

The high incidence of respiratory difficulty and lethargy which are the result of overweight and edema of all tissue, especially the lungs, necessitates special care. The infant should be kept in an incubator with constant oxygen for five to seven days. Each day the oxygen flow should be decreased and the infant watched carefully for evidence of respiratory distress. If, at the end of five days, the infant is able to get along without oxygen, it is safe to discontinue it. The infant, however, should be watched carefully following cessation of oxygen therapy until discharge. Frequent change in position and mild physical stimulation should be carried out constantly. The infant should be kept in the newborn nursery at least two weeks or until all signs of prematurity are past.

Conclusion

The pregnant diabetic presents new problems for the internist, obstetrician and pediatrician. As physiological treatment of diabetes improves, and as increasing numbers of these patients reach the child-bearing age and are able to conceive, more problems become apparent. Extension of the life expectancy and the increase of the child-bearing potential of the diabetic woman has created problems not before open to observation. They were practically unknown thirty years ago. Today, the pregnant diabetic faces risks of foetal loss obviously far greater than those of her non-diabetic sister. The etiology of this increased foetal loss is not clearly understood. It is certain that it is not due to any single factor. Many things contribute: vascular and renal damage, hormone imbalance, metabolic derangement, and possibly genetic weakness. Much investigation is yet to be done to clarify the etiology of, and subsequently develop corrective therapy for, these deficiencies. An extensive and co-ordinated program carried out by many investigators is essential. Rigid standards and classifications must be set up to properly evaluate the various theories as to etiology and therapy of this problem.

Bibliography

1. Allen: Am. J. Obst. & Gynec., 38:982, 1939.
2. Barns: J. Obst. and Gynec., Brit. Emp., 48:707, 1941.
3. Bill, Posey: Am. J. Obst. & Gynec., 48:405, 1944.
4. Bouchardat: De La Glycosurie ou Diabete Sucre, Paris Bailliere, 1875.
5. Colwell, A. R.: Diabetes Mellitus. Springfield: Year Book Publishers, 1947.
6. Crampton, Palmer, Steenrod & Davis: Proc. Am. Diabetes A., October, 1950.
7. Given, Douglas and Tolstoi: Am. J. Obst. & Gynec., 59:729, 1950.
8. Henley; New Zealand M. J., 46:386, 1947.
9. Joslin, Root, White and Marble: Treatment of Diabetes Mellitus. 9th Edition, Lea & Febiger, 1952.
10. Keltz, Keaty and Hellbourn: South. M. J., 43:803, 1950.
11. Kramer: Am. J. Obst. & Gynec., 30:68-75, 1935.
12. Martensson: Acta med. Scandinav., 137:435-54, 1950.
13. Pease, Smallpiece and Lennon: Brit. M. J., 1:1296, 1951.
14. Reis, DaCosta and Allweiss: Am. J. Obst. & Gynec., 60:1023, 1950.
15. Rike, Fawcett: Am. J. Obst. & Gynec., 56:484, 1948.
16. Smith and Smith: J. Clin. Endocrinol., 1:470, 1941.
17. White: Am. J. Med., 7:609-16, 1949.

TELEPHONE SOLICITATION

Among the many telephone calls which doctors receive there is one type, the telephone solicitation for money, which is sometimes difficult to manage. Some of the calls come from legitimate and well-known organizations, and occasion no difficulty because they are well known.

Others originate from unfamiliar sources, and include requests for purchase of advertising space in previously unheard-of newspapers, magazines and bulletins. In campaign years funds are solicited by many political committees other than the official party organizations. In addition there are also many charitable enterprises approaching the doctor with a financial appeal.

The Better Business Bureau advice on this subject is simple and easy to follow. If the solicitee is tempted to donate to a cause with which he is unfamiliar, he should do so only after he has investigated. Information may be obtained from Better Business Bureaus or from the local Chamber of Commerce.—Editorial, *Journal of the Indiana State Medical Association*, August, 1952.

Breast Carcinoma Study: Relation to Thyroid Disease and Diabetes

By R. Winston Repert, M.D.
Durango, Colorado

IT IS the purpose of this paper to review 306 cases of breast carcinoma entering Butterworth Hospital between January 1, 1939 and January 1, 1949; with special regard to clinical endocrinologic factors.

Although 306 cases entered the hospital, only 274 had any surgical treatment. This treatment ranged from simple biopsy to complete radical mastectomy, with and without x-radiation therapy.

In this institution, the surgery staff consists of members with varying amounts of surgical training. Several different principles of management are represented in that training. These statistics are, therefore, representative of many smaller open-staffed hospitals in this country. The contrast in surgical staffs and operative techniques, together with the results of treatment, makes an interesting comparison with larger university hospitals where surgeons tend to adhere to one technique and one method of handling surgical problems.

Roentgen therapy was used in the majority of cases. The technique and dosage have been uniform. About one half of the patients received treatment from radiologists in private practice.

Histological sections with equivocal microscopic diagnosis have usually been forwarded to the University of Michigan pathology department for confirmatory studies.

Follow-up information was obtained in approximately 80 per cent of the cases. All cases without follow-ups have been considered as non-survivals.

In the statistical analysis we have included only those cases up to 1944, during which time 141 cases were operated on for breast carcinoma. The last five years of the case studies are of no value as to clinical survival statistics; therefore, they will be excluded from any computations.

Seventy-one (50 per cent) of the patients survived for five years. Of the remaining cases, twenty-nine had no follow-up and forty-one expired. The causes of death were as follows: nineteen from carcinoma of the breast, seven from unrelated causes, and twelve unknown. There were three surgical deaths, two of which were due to pulmonary emboli. This is a survival rate of 50.3 per cent. All those without follow-ups (20 per cent) were considered as non-survivals.

Of the seventy-one patients who survived five years, twenty-eight (39.4 per cent) had axillary metastasis, and forty-three (60.5 per cent), no axillary metastasis at the time of operation.

It is a well-established fact that between 70 and 75 per cent[3,11] of patients with breast carcinoma and no axillary metastasis survive five years after radical breast operations. Also, it has been established that 20-25 per cent of patients with axillary metastasis survive five years. According to Harrington,[5] four years is the average survival of patients with breast carcinoma who have no treatment at all. Averaging the above survival percentages, it is seen that 45-50 per cent of the total number of patients with and without axillary metastasis, treated by surgical methods, survive five years. This figure coincides with the figure of 50 per cent five year survivals at this hospital. Also, it should be noted that thirty-five (50 per cent) of the seventy-one patients who survived for five years had simple mastectomies. The extent of surgery beyond complete removal of the breast tissue apparently did not affect the survival rate appreciably.

Statistics taken from American Cancer Society data[8] show that the incidence of breast carcinoma among all females is 58.4 per 100,000; and the death rate 24 per 100,000. These figures imply that 50 per cent of all patients with breast cancer are being cured without regard to number of years survival. This may not be the usual method for computing clinical survival statistics but it would seem that a national survey of thousands of cases would be a more accurate means of analysis than computations from isolated series of a few hundred cases.

The average age of onset in this series is 57.4 years and this is in agreement with most authors. Hoopes and McGraw[6] reported 51.2 years as the average.

Finney and Merkel[1] in their report found that 74 per cent of patients with breast carcinoma had passed menopause. In this series of cases, 65 per cent were postmenopausal.

The youngest age of onset of breast carcinoma was reported by Sears[2] as occurring in a ten-year-

Dr. Repert was formerly Surgical Resident at the Butterworth Hospital, Grand Rapids, Michigan.

TABLE I. THYROID DISEASE IN FEMALES

Incidence	Age Group	Rate	Per Cent
†Expected	20-64	10.9-14.2/1000	1.09-1.42
with Breast Cancer	18-75	120/1000	12

†Data from Metropolitan Life Insurance Co.

TABLE II. DIABETES IN FEMALES

Incidence	Age Group	Rate	Per Cent
*Exepected	15-84	6.77/1000	.67
with Breast Cancer	18-75	49.1/1000	4.9

*Courtesy of American Cancer Society.

old girl. Peck[7] gives credit to Blodgett who reported a case in 1897 occurring in a girl twelve years old. In this series, there were three patients under twenty years of age, which fact is remarkable in that only eighteen cases of breast carcinoma in females under twenty years of age had appeared in the literature up to 1943.[2]

Endocrinologic Study

Special attention was directed to recording incidence of endocrinologic disorders. It soon became apparent that an unusually large number of cases had associated thyroid disease, and possibly diabetes mellitus. To prove this, figures from the Metropolitan Life Insurance Statistics Division in New York City[9] were obtained.

The incidence of thyroid disease for both men and women of all ages is .62 per 1,000. For women between the ages of 20 and 64 years of age (Table I) the incidence varies between 10.9 per 1,000 and 14.2 per 1,000. Thus, the incidence of thyroid disease in the same age group as this breast carcinoma series averages twelve per 1,000 females (1.2 per cent). Thirty-six of the 305 females with breast carcinoma had, or had had, thyroid disease at the time of their admission to the hospital. This is an incidence of 118 per 1000 or approximately 12 per cent and is ten times the expected incidence. Although the Metropolitan Life Insurance group considers all thyroid disease in their statistics, we have included only those cases where a history of thyroidectomy was obtained or where a goiter was present on physical examination. Moreover, many of the cases had incomplete histories, and it is not unreasonable to assume that even more cases of thyroid disease were present. Geschickter[4] in 1948 recommended that a history of whether or not thyroid disease is present be included in each breast tumor workup. He did not give any further information as to incidence or the significance of this finding in relation to breast cancer.

In regard to diabetes mellitus (Table II), Spiegelman and Marks[10] found the incidence to be 4.52 cases per 1000 (.45 per cent). In females between the ages of fifteen and eighty-four years, it was 6.77 per 1000 (.67 per cent). In this series of cases, there were fifteen persons with known diabetes mellitus, which constitutes an incidence of 49.1 per 1000 (4.9 per cent) or eight times that which normally occurs.

In addition to the above findings, other evidence suggestive of hormonal imbalance was found. Fifty-seven (25 per cent) of 306 females had or had had pelvic operations. This figure includes hysterectomies for fibroids, carcinoma, and endometriosis; several oophorectomies for carcinoma and endometriosis; several Cesarean sections and a few dilatations and currettages for abnormal bleeding. Sixteen patients had menorrhagia; twenty-seven had metrorrhagia; and six had oligomenorrhea or amenorrhea. The incidence of sterility was 10 per cent.

Waggoner[12] reported a study of breast carcinoma in the premenopausal female in 1948, in which he called attention to the numerous deviations from hormonal balance in the group of patients he analyzed. The above findings, including the increased incidence of diabetes and thyroid disease are only an enlargement of his theory.

Conclusions

1. Although this hospital is smaller than most university hospitals, and has a surgical staff with varying amounts of training and with varying attitudes toward the treatment of breast carcinoma, the clinical survival statistics are comparable with the larger teaching-center hospitals.
2. One half of the patients who survived five years following surgery for breast carcinoma had simple mastectomies.
3. The incidence of thyroid disease is ten times, and the incidence of diabetes mellitus eight times as great in women with breast carcinoma than in women of comparable ages in the general population.
4. A general hormonal imbalance accompanies breast carcinoma.

Bibliography

1. Finney, G. G.; Merkel, W. C., and Miller, D. B.: Carcinoma of the Breast. Ann. Surg., 125:673, June, 1947.
2. de Cholnoky, Tibor: Mammary Cancer in Youth. Surg., Gynec. & Obst., N: 55-60, 1943.

(Continued on Page 1335)

The Family Doctor and Diabetes

By E. A. Bicknell, M.D.
Detroit, Michigan

IF THE diabetic is to be uncovered early, there is only one who can do it. He is the family doctor. Most cases picked up early are easy problems, both for the patient and the physician. Any capable G.P. can instruct and handle most diabetics. The unruly and brittle can't be controlled well by anyone. Our specialist friends should be allowed the chance to help them.

Complicated diabetics usually first approach their own doctors when trouble assails them. We are the first to see infections, vascular complications, acidosis, and hypoglycemic coma. Treated early, all these are much more amenable to therapy. A few hundred units of insulin early in coma make a tremendous difference, as Dr. Joslin brings out so well. Dr. Frank Allen of Lahey Clinic, who was with me in Toronto in 1922 when insulin was introduced, spoke at Women's Hospital here a few years ago and stated flatly that most diabetics should be cared for by G.P.s.

Personally, I treat all my cases and find it no harder than most, and a lot easier than many diseases to care for. Great pains to explain the disease and its care very minutely to the patient pays dividends. Everyone can, with the clinitablets, test for sugar and acidosis, so there is no excuse except carelessness for so many bad results. Patients should be taught that meticulous care pays off in better health and longer life with fewer complications.

I almost never see a coma or severe insulin shock except in emergency calls on patients of other doctors or clinics. Constant hammering at the importance of control and repeated warnings of possible blindness, loss of limb or even life, causes most to mind their P's and Q's.

I would like to suggest a few reasons why the family doctor may be able to handle diabetics even better than the specialist.

Firstly, the neighborhood doctor not only knows the patient, but also the family, in-laws, siblings, wife, parents, grandparents, neighbors, local merchants, et cetera. If the patient steps out of line the doctor hears of it from one of these sources promptly and is able to sit down and talk it over with them and find out the difficulty and re-explain the dangers they are courting.

Secondly, in being a friend most patients regard their doctor similarly so he can explain that he would feel badly if they should break treatment, pointing out that they hurt not only themselves but their wife and children, and also let their doctor down, casting a reflection on his professional ability. This deters most conscientious people.

Thirdly, almost everyone admits that anxiety states and nerve tensions aggravate the disease. A specialist might not hear of friction at home as people often try to hide these things. Local contacts are informative regarding such matters and it is possible for the doctor to institute corrective measures early.

Lastly, I find that even though focal infection is generally conceded to be a factor in aggravating the disease, and most men correct dental and tonsillar infections, genital focal infections are ignored, i.e., chronic prostatitis and endocervicitis. In my practice we always check and correct these and have had many diabetics improve remarkably after eradicating the infection.

Many internists think that the G.P., by and large, should not treat diabetes, but most leaders, as quoted above, and others, such as Dr. Wilder, Dr. Palmer, and Dr. Barnes, who recently spoke at our Mt. Carmel Mercy clinics, and also our own Dr. Frank Scott Perkin, assure me differently.

When Dr. Allen addressed the G.P.s he spoke so kindly that in discussing his paper I stated that it was a great pleasure to have him, and pointed out that we appreciated the fact that he didn't talk down to the G.P., and further complimented him because he didn't throw out a smoke screen of words to cloud the issue and befog the already burdened minds of the G.P.s. Many men seem to delight in trying to make simple things seem complicated. I have noticed that they are always the lesser lights in medicine. The nationwide leaders always get their message across clearly and succinctly, and with a sincere desire to help the patient. Others often seem to me to try to frighten both the doctors and the patients by making the case seem horribly complex, thereby inducing them to go only to specialists. In my opinion this impedes the progress of the control of diabetes immeasurably and increases the

cost of medical care. Haranguing over a few units of insulin or a few calories doesn't fool even the patient. They soon learn there is a wide safety factor and we end up like the boy who cried "wolf" once too often.

Poppycock of the most inane type still appears in our medical journals. Within the year I read a very exhaustive article by a professor at a medical school printed in a journal read almost 100 per cent by G.P.s which stated that in order to distinguish between hypoglycemic and acidotic coma a blood glucose must be done. This is ridiculous. I have been called three different times to an old diabetic in coma. He goes to a hospital clinic as an outpatient. The family always thinks Granddaddy has had a stroke. He is crowding eighty and has taken insulin for many years. His spells usually occur Sunday morning after extra activity on Saturday, with no reduction in his protamine zinc insulin. He is invariably in deep coma of more than an hour's duration. To wait for blood studies might finish him. I give glucose, 50 per cent, I.V. and he always wakes up in minutes. Glucose can't hurt him even if he is in diabetic coma. I have heard specialists harangue at great length on how to differentiate them but this seems so simple. Furthermore, we have always been gravely warned of the dire fate in store for these hypoglycemic victims, i.e., cerebral and coronary thrombosis, serious brain damage, et cetera. I'm sure that chronic hypoglycemia may directly or indirectly, by cerebral anoxia associated with the drop in blood pressure and resulting poor brain circulation, cause irreparable brain damage; but the case cited above has convinced me that in spite of age, advanced arteriosclerosis, et cetera, there is not necessarily any grave risk if these cases are not allowed to languish while the laboratory make the diagnosis, and that can be quite a wait in many communities on a Sunday or a holiday, especially if the doctor is called to the outlying districts.

I'm sure that many of my G.P. friends take better care of their diabetics than many men who limit their practice. Everyone should be evaluated on his own merit. One can only use the brain that God gave him and honestly try to practice good medicine for the greater good of the patient. Some may think that medical papers shouldn't preach sermons. I don't, and think we are often too scientific, to the adverse interest of the patient. Many forget that Medicine is an art, not an exact science. I shall cite one case to show that some specialists may be so short sighted that they miss the ramifications even when it is in their own field.

Mr. George McL., age 54, a bachelor of Scottish Canadian origin, employed for years in a responsible position requiring good vision, was referred to me shortly after I returned from Service, with this history—While I was in the army he noticed failing vision so he consulted a well known oculist who told him his fundi showed a diabetic-like retinitis, but because there was no sugar in the urine, he assured him this was not the cause and sent him on his way. When his vision regressed further he consulted another oculist equally well known who told him the same thing, after also taking a fasting blood sugar. After more years, and losing his good job because of loss of vision, and having to accept a position as watchman, Mr. McL. finally consulted another oculist who repeated the performance, but added these magic words, "go and see your family doctor." A short study revealed by a glucose tolerance curve that he was diabetic. Diet plus rutin, without insulin, stopped the progress but we couldn't push the water back over the dam. I asked if there had been any history taken and was told none had been. It would have revealed that his mother was diabetic and had lost a leg in pre-insulin days.

As I talked to Mr. McL. one day in the office, he pointed to the picture of the beloved Family Doctor that hangs on the office wall, and asked me if I knew who the doctor was. I promptly replied that he was Queen Victoria's personal physician, et cetera, but he wanted to know if I knew his name. I did not, so he told me it was Sir James Clark, his great-great-et cetera uncle. I remembered that Osler had lauded him for his care of the dying Keats in Italy, in a paper given in his early days at Hopkins. I was spell-bound by Mr. McL.'s story and I seemed to hear a whirling sound. Was it his great-great-uncle turning over in his grave?

Fracture of the Maxilla

By Claire L. Straith, M.D., and
Richard E. Straith, M.D.
Detroit, Michigan

IN THIS mechanical age, auto injuries cause a great percentage of our fractured maxillae and for this reason we will deal primarily with injuries of this type.

In a personal record of fifty consecutive cases coming for various facial injuries following automobile accidents, we found that only eight of these persons were drivers, eight victims in the back seat and thirty-four of the patients were riding in the front seat beside the driver, most of them women. It is a well known fact that most fatalities occur in the guest passenger seat and therefore we have rightly termed it, I believe, the "death seat."

There are, in general, three types of injuries sustained by persons riding in this position. (Fig. 1.)

1. When the patient is thrown forward the head hits the wind-shield glass and often a wide hole is made in this glass and the face comes down on the jagged edge, receiving numerous and jagged cuts of the facial skin, as well as occasionally fractures of the nose, malar or maxillary bones.

2. Type two is even more disastrous to the maxilla because in this type the head strikes the windshield first and then the face is thrown forward on the top of the dash where often are located numerous gadgets, knobs, or at least a metal covering which is accountable for many crushing injuries of the face.

3. The third type is designated as that type where a patient's face is thrown directly into the dash and this is often accountable for many injuries, especially to women. Many babies are killed while riding on the mother's knee by their head being thrown forcibly into the dash at the time of accidents or sudden stops.

Occasionally, we do have another type causing severe maxillary fractures which is termed the "steering post" injury. Usually, the wheel protects the driver but occasionally the head of the victim driving the car is thrown downward and forward and the chin, teeth or face strikes the steering post or rim of the wheel with such force that fractures result.

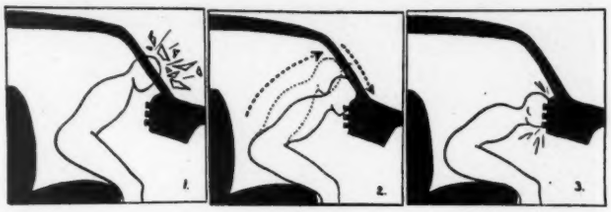


Fig. 1. There are three types of guest passenger injuries. As per the diagram: Type 1.—The victim is thrown into the windshield and receives multiple facial cuts. This type is by far the most frequent.

Type 2.—The windshield is hit first, then the face comes down on the dash with crushing force.

Type 3.—Children and short people are frequently thrown directly into the dash. The last two cause most of the crushing facial fractures.

One cannot consider factures of the maxilla without including the malar bone fractures. The malar bone, being more prominent than the maxilla, is often the first site of impact and therefore frequently injured. The examination of facial bones is a very important feature. Swelling occurs so rapidly after such an injury that unless early, careful examination is made, fractures of the malar and often of the maxilla are missed and a resultant deformity causes a rather embarrssing situation. (Fig. 2.)

As early as possible following injury, one should make a careful examination by passing the index finger of each hand simultaneously around the orbit. Beginning at the root of the nose with rather heavy, deep pressure, in spite of the pain, the fingers are passed laterally, noting especially the attachments of the malar bone to the frontal. Oftentimes a definite tenderness is elicited at this point or in fact a depression or crepitus when there is a fracture of the malar with considerable separation from the frontal. As the finger is passed around the rim of the orbit the most likely place for a fracture is at the infraorbital foramina directly under the orbit on one or both sides and on deep pressure the affected side will show that the finger is much more depressed than the one following the rim of the orbit on an unaffected side. Emphysema is sometimes found in tissue over the antrum. The fingers are then passed up toward the nose and sometimes fractures of the entire maxilla with a falling away of the middle third of the face can be elicited on the lateral walls of the nose. The nose is then examined manually. The first two fingers of the left hand hold the upper nose firmly and with the other two fingers

From the Straith Clinic for Plastic and Reconstructive Surgery.

Fig. 2. Malar bone injuries are common in Type two and three injuries. They should be diagnosed and operated early for best results. Note crushed right malar and result after intra-oral elevation.

Fig. 3. Depressions of the zygomatic arch can be elevated through the same intra-oral incision, as illustrated here.

Fig. 4. Under local pentathol or other anaesthesia, a small incision is made above the last molar tooth and a curved elevator inserted through the mouth. The malar can usually be forced upward and into position quite easily by this means.

of the other hand lateral motions are made to elicit fractures of the nasal bone.

The zygomatic arch is palpated by extending the fingers backward from the malar bone along the arch. Depressions or irregularities of the bone can often be felt without much difficulty. (Fig. 3.) The maxillary fractures are often missed entirely simply by the fact that people do not look into the mouth carefully and feel the upper arch.

If the lips are retracted one can often notice the downward dropping of the entire maxilla in case of severe fractures. Then the finger inside the mouth is passed along the anterior edge of the maxillary wall and on the affected side, or both sides. Definite sharp protrusions of the thin eggshell wall of the antrum can often be felt. Sometimes the depressed malar can be moved by finger pressure. If the teeth are grasped the entire maxilla can often be pushed upward or pulled downward and laterally in cases of severe fracture. Midline fractures of the maxilla, of course, are easily detected. One rather characteristic thing in fractures of the maxilla is that the entire middle third of the face is unduly elongated in comparison with the rest of the face.

X-rays, of course, should be taken if the patient's condition permits but they should be done cautiously without too much movement of the head due to the possibility of brain injury or skull fracture.

In the malar bone fracture, there are several very common symptoms, the first being anesthesia of the upper lip and side of the nose on the affected side. If the malar is badly dropped in position, the orbit follows and there is usually a double vision and together with this posterior position of the depressed malar, we find that the coronoid process on opening the mouth impinges on the rear surface of the malar; therefore the patient encounters difficulty in opening the mouth completely.

The treatment of, first, the malar bone fracture should be instituted early if possible, for the longer the treatment is delayed, the more difficult it is to elevate a depressed malar bone into proper position. Several methods are applicable, of which one might mention the Gillies method. This consisting of introducing an elevator from the temporal

Fig. 5. Result of unreduced malar fracture leaving cheek depressed and eye (artificial) dropped down. Preserved cartilage was introduced into the orbital floor and under skin over cheek bone to correct the deformity.

Fig. 6. Open bite malocclusion produced by an impacted maxillary fracture. Elastic traction anteriorly should be applied early between upper and lower teeth.

region down underneath the zygomatic arch and malar bone, and with a bandage as a fulcrum against the skull, the zygomatic arch and malar bone is forced outward and forward.

An old method seldom used consists in using a large towel clip anteriorly which is passed through the skin, grasping the entire malar bone and forcing it outward. Some prefer to enter the antrum through the inferior meatus and elevate the depressed malar with an antral trocar. Some insert a small rubber balloon in the antrum and inflate it to maintain elevation of the orbital floor.

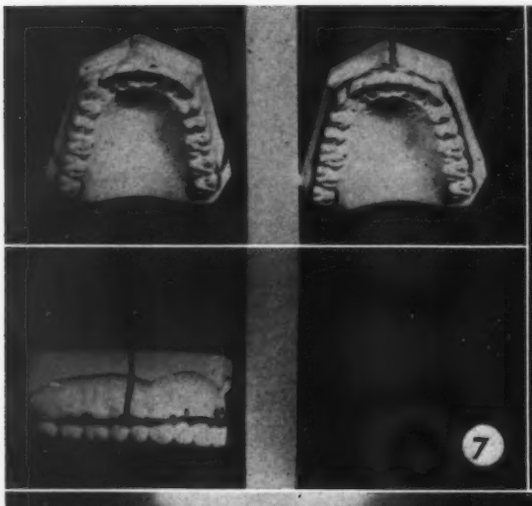
In our Clinic, we have for years preferred the intra-oral method of elevating the malar bone. (Fig. 4.) This can be done quickly with little or no danger of infection and very little subsequent reaction. In the intra-oral method, one simply cleans the inside of the oral cavity inside the lip and under the malar bone and applies iodine or some other antiseptic. Under local anesthesia, pentathol or general anesthesia, a quarter inch incision is made above the last molar tooth and behind the lower attachment of the malar bone. A curved hemostat, scissors, or other instrument is introduced into this opening and by forcefully lifting up the malar bone, it usually snaps back into position with very little difficulty. Extra pressure is made from the outside toward the mid line to cause some impaction of the fragments on the nasal side to hold the bone in position. The wound is left open for drainage and antibiotics are administered following the operation.

When the malar bone is very badly comminuted it may require more radical treatment, and in this event, a one inch incision is made in the outer angle of the orbit or just above the eyebrow, the edges of the frontal process are isolated and the malar bone is held in a forceps while a small hole is drilled in the end of each fragment. A steel or silver wire is passed through these openings and the malar bone pulled up in position by tightening the wire. The wound is then closed with subcuticular sutures and very little scar will result from the operation.

Delay, on the other hand, results in a lowered orbital floor with an eyeball dropped considerably and often causing double vision and considerable deformity. This can subsequently be corrected by insertion of cartilage implants under the eyeball or artificial eye and around over the malar prominence to restore it to normalcy. (Fig. 5.)

Maxillary fractures *per se* are of several varieties, unilateral, transverse, comminuted, et cetera. The driver whose face hits the steering post or the passenger whose face contacts the dash, often receives impacted transverse maxillary fractures resulting in an open bite malocclusion, namely, the closure of the molar teeth with the incisors wide apart. Early treatment of this condition should consist of manual movement of the maxilla to dislodge the impaction and application of wires to the upper and lower teeth. Elastic traction in the proper direction between the upper and lower jaw can be introduced and will usually cause a correction of the deformity within forty-eight hours. (Fig. 6.)

Unilateral maxillary fractures are more rare and can be treated by forcing the depressed fragment up into position, then wiring the teeth in the unaffected maxilla to the mandibular teeth. The



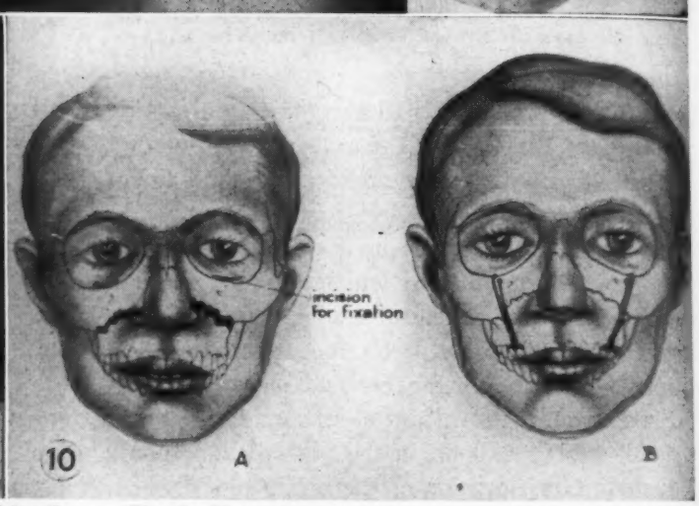
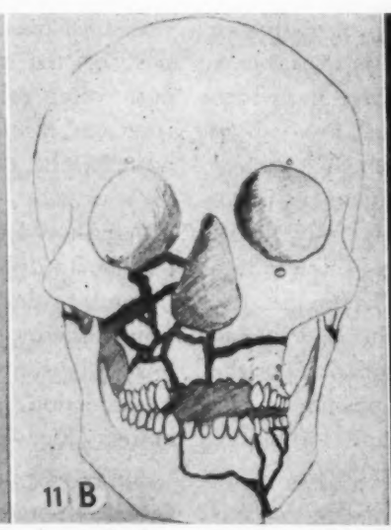


Fig. 7. Arch bars can be easily constructed with silver, steel, or bronze wire, twisted first around the last molar, then brought around the arch and twisted anteriorly. The arch wire should then be wired to several teeth. (Risdon method wiring.)

Fig. 8. Note elongated appearance of the middle third of the face. X-ray shows badly separated and depressed malar and maxillary fracture, nose, et cetera.

Fig. 9. Typical plaster head cap with coat hanger wire attachments. Suspension wires pass through the cheek to the maxillary arch wire (Feiderspiel method).

Fig. 10. In some cases, stainless steel wires can be passed from drill holes in solid bones under the soft tissue to support the maxilla. (Adams method).



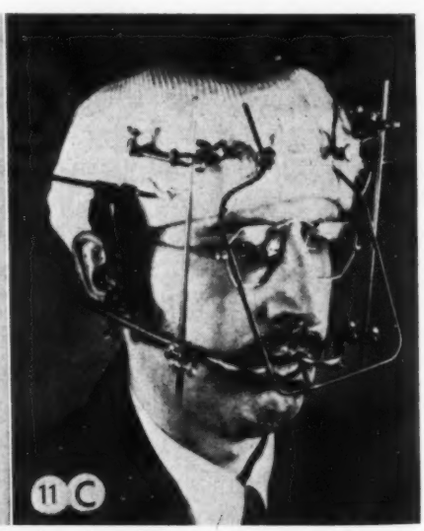


Fig. (11a., 11b., 11c.) A goose-neck piece of pipe was blown into this patient's face, lodging in the antrum and floor of the nose. The maxilla was badly comminuted as shown in drawing of x-ray. The mandible also had several fractures.

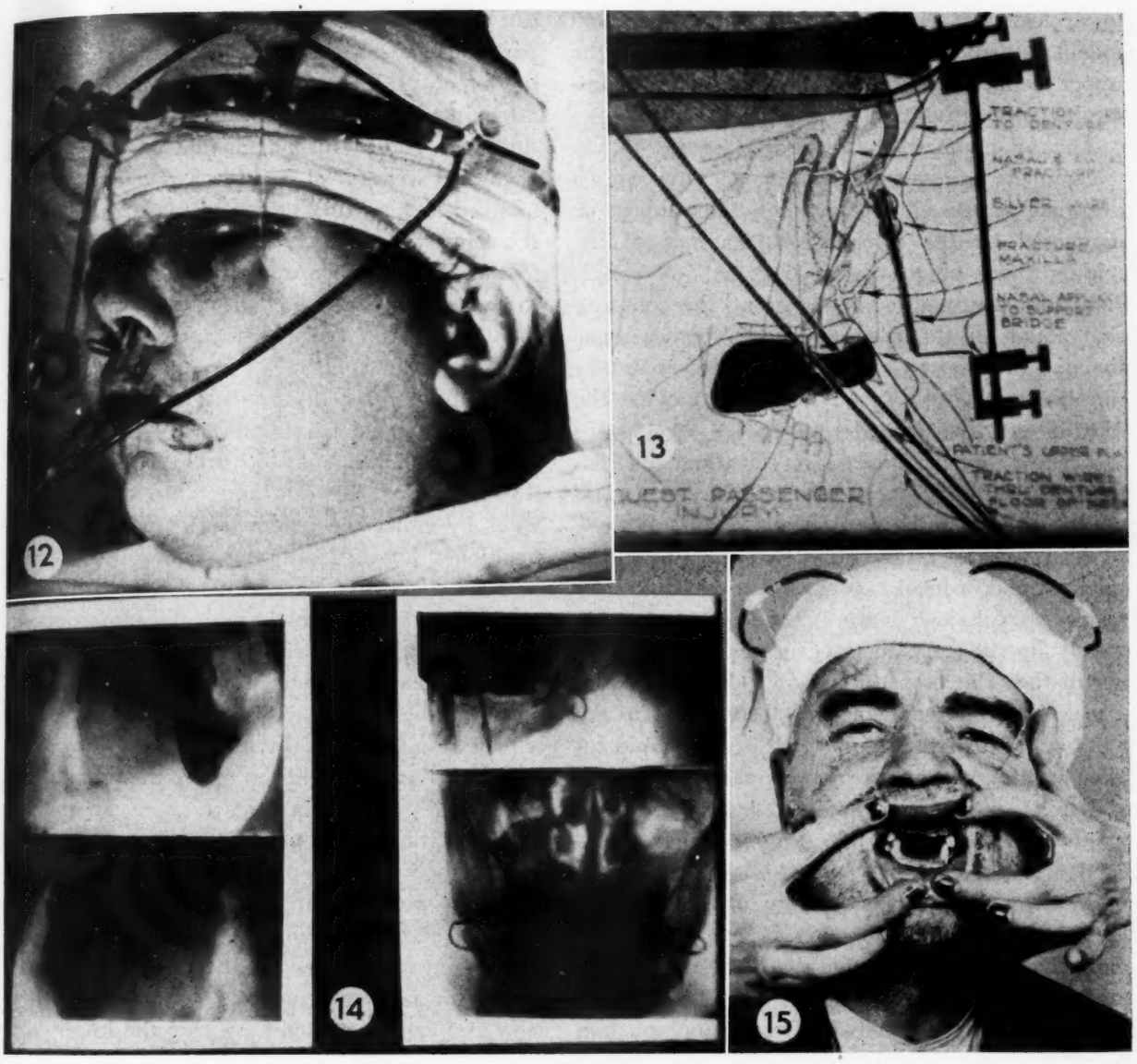


Fig. 12. The maxilla here was "suspended in space" by rigid bars fixed to head cap attachment until consolidation took place (see Fig. 11). Note also elastic traction to anterior bow to produce anterior positioning of entire maxilla.

Fig. 13. Drawing from x-ray-edentulous fracture of maxilla supported by Feiderspiel wiring to upper plate which acts as sling. Anterior traction supplied by silver wire passed through floor of nose, palate and upper plate and out under upper lip. Elastic traction from silver wire to coat-hanger arch wire. Note also wired nasal fracture and special support for crushed nose.

Fig. 14. X-rays of lower edentulous bilateral jaw fracture show chin fragment pulled down at right angle. The lower plate was wired to the mandible and the upper and lower plates wired together and both suspended by Feiderspiel wires to head cap.

Fig. 15. Anterior teeth on plate were removed to facilitate feeding (See Fig. 14). Both jaws suspended by wires to head cap.

Fig. 16. Prevention of these crushing facial injuries as illustrated by the baby, is a compelling problem. Many children are killed annually by being thrown against the dash. The authors believe a crash-padded dash would prevent many deaths and serious injuries.

lower teeth act as a splint to hold the fractured maxilla up into position. An arch bar around the upper teeth wired into position often aids in maintaining proper position of the teeth. (Fig. 7.)

The Adams method can also be used.

Complete transverse maxillary fractures with a dropping of the entire fragments may almost be diagnosed by the elongated appearance of the middle third of the face. (Fig. 8.) A simple closure of the mouth and watching the compression action of the upper jaw will further make the diagnosis certain and this can be verified by simply grasping the upper arch and moving the maxilla en masse with the fingers.

The treatment consists in elevating this depressed maxilla to its proper position and maintaining this position until healing takes place—which is usually rather rapid. Under the Feiderspiel method, a head cast can be applied incorporating coat hanger wires or other attachments which protrude two to three inches over the corner of the orbit or malar region. (Fig. 9.) From a maxillary arch bar which has been wired to the teeth or from wires around teeth in the cuspid region, steel or bronze wires are threaded on a long abdominal needle and these traction wires passed up through the cheek. The wires are then shortened and fixed to the "horns" in the head cast or held up with elastic traction until the lower arch just comes up into what appears to be normal occlusion. This position should be maintained for three to four weeks.

To eliminate external appliances, incision can be made below the infraorbital rim, holes drilled in the rim and a steel wire passed through this opening and then down underneath the cheek into the mouth. The wire is then attached to the arch bar around the upper teeth and the upward traction on the upper arch is maintained by twisting these stainless steel wires until the upper jaw is held in the proper position of occlusion with the lower teeth as suggested by Adams. (Fig. 10.) Further traction on the posterior portions of the maxilla can be had by passing another wire from the molar region up behind the malar bone and fastening it to a small opening drilled in the end of the frontal prominence above the eyebrow.

Complicated crushing maxillary fractures may require much more attention. (Fig. 11A, 11B, 11C.) When the anterior antral walls are badly crushed and the maxilla displaced posteriorly, one can apply a cast metal splint cemented to the upper teeth and, by means of side-arms, the jaw can be suspended in place by rigid bars fastened to attachments on the head-cap. (Fig. 12.) Oftentimes the badly crushed maxilla has been forced backward well out of position and must be pulled forward. This can be done by elastic traction on the splint when the cast splint has been cemented to the upper teeth. Another arch bar is fastened to the head gear, passed around in front of the mouth and the elastic traction attached to the cast upper jaw splint.

Edentulous patients present further difficulties. The patient's old plate can be utilized as a sling. (Fig. 13.) Holes may be drilled in the rim of this plate and the jaw and plate suspended by wires by either the Feiderspiel or Adams method mentioned above. If anterior traction is necessary, a drill hole is made in the nasal floor behind the alveolar arch and also through the plate opposite this opening. (Fig. 13.) A silver wire is then passed through the plate through the maxilla and out into the nasal cavity, the upper end of the wire is re-introduced through the nose down under the lip and brought out above the maxilla into the mouth. Elastic forward traction can then be made on the entire plate, maxilla and all, and the crushed maxilla pulled forward and downward into proper position and maintained thus by constant elastic traction.

Combined fractures of the edentulous upper and lower jaws present even more difficult problems and can be treated by wiring the lower plate to the mandible by circummandibular wiring. (Fig. 14.) Then the upper and lower plates are wired together and the entire mass suspended by Federspiel wiring to the head cap. Anterior teeth on the plates are removed to facilitate feeding. (Fig. 15.) If necessary, traction wires can be again applied to mandible or maxilla to produce anterior positioning.

Prevention of such fractures is also a most important feature. Since most maxillary fractures occur as guest passenger injuries, the author has long advocated the removal of gadgets, cranks, et cetera, from the dash of automobiles and applying a sponge rubber crash pad as a permanent fixture, or as an accessory. (Fig.16.) I firmly believe that this would eliminate a large portion of the crushing maxillary fractures and deaths which occur to those riding in the "death seat" of automobiles.

1713 David Whitney Bldg.

Abscesses of the Liver and Right Subdiaphragmatic Region

By Shattuck W. Hartwell, M.D., F.A.C.S.
Muskegon, Michigan

FEW SURGEONS or physicians see enough cases either of subdiaphragmatic or of liver abscesses to become familiar with the problems relative to their diagnosis or their treatment. The following cases, referred to the author for consultation and surgical treatment, are offered as examples of the varied symptom complexes found in these disorders. They are also illustrative of the necessity for individualization in the clinical assessment of such cases.

It is not the writer's purpose to review the historical phases of the subject or to cover all the possibilities in diagnosis, differential diagnosis, or treatment. A fairly comprehensive review of the more recent, pertinent literature on the subject, however, brings to light some lesser-known facts and concepts which bear brief repetition and which the following case reports emphasize.

Liver abscesses are of two main types: (1) amebic; and (2) septic or pyogenic. The most competent authorities estimate that from 5 to 10 per cent of the population of the United States, regardless of place of residence, harbor endameba hystolytica in their bodies. Dysentery, or actively symptomatic amebiasis, occurs only in a small percentage of those infested. The occurrence of pyogenic liver abscess is even less frequent than is amebic abscess. Amebic abscess may follow hepatic trauma in an infected person. It is rare in women. Either type of liver abscess, amebic or pyogenic, may be acute or chronic. In the past, mortality from any type of liver, or of subdiaphragmatic, abscess has been high. A primary liver abscess may become also a subdiaphragmatic abscess—and vice versa. Likewise, a subdiaphragmatic abscess may perforate the diaphragm into the pleural space to produce a secondary empyema, or it may further perforate through the lung to establish drainage through the tracheo-bronchial tree. And the opposite can take place; a lung or pleural abscess can perforate the diaphragm and create a secondary subdiaphragmatic or even a liver abscess by direct extension. Loculation, or daughter abscesses, occur; distant, metastatic abscesses occur. Multiple pyogenic liver abscesses appear to be invariably fatal.

Amebic abscesses may occur without any preceding diarrhea. Recently a higher index of suspicion of amebiasis has led to earlier diagnosis. A better understanding of the clinical problem presented by amebic abscess has led to closed drainage plus emetine therapy with a very marked improvement in results in these cases. The primary surgical requirement in amebic cases is to avoid introducing secondary infection into amebic abscesses. Emetine, 1 gr. daily hypodermically, plays the major role in curing amebic abscesses and may be all that is required.

Because of the toxicity of emetine, there exists in the minds of most doctors a great reluctance to use it. Textbook doses are minimal instead of therapeutic. It should be acknowledged both by clinician and surgeon that any patient with an amebic liver abscess is already critically ill. Berne[2] says that because of the clinician's fear of emetine "many patients with amebic abscess of the liver have retained possession of excellent hearts but have died of insufficiently treated amebic abscesses . . . Amebic abscess is a special type of liver necrosis, as is a gumma, and emetine is approximately as much a specific as is neoarsphenamine." Open surgical intervention is contra-indicated; adequate emetine will cure the condition.

Contrary to most older teachings, the so-called "anchovy" or "prune juice" type of abscess content is not always present. In one third of one large series the abscess content was whitish, glary, puriform, some with very foul odor, some with no odor, but all were negative for pyogenic organisms upon both aerobic and anaerobic culture. Harrington[5] and others have pointed out that it may be necessary to curette the abscess wall to find the amebae—if open surgery becomes necessary or has been undertaken.

Berne,[2] reporting Los Angeles County Hospital cases of amebic abscess, states that previous to 1932 mortality was 85 per cent with many cases properly diagnosed only at autopsy. Of seventy-four cases of amebic liver abscess diagnosed in the next ten years, only thirty patients recalled any episode of diarrhea and six complained of constipation. The stools usually (forty out of fifty-five cases examined) contained cysts, trophozoites, or both. Fifty-eight per cent of cases presented an acute, severe process involving the right upper abdomen

Fig. 1.—Case 1. Roentgenogram of chest taken July 21, 1946, showing pleural fluid on the right.

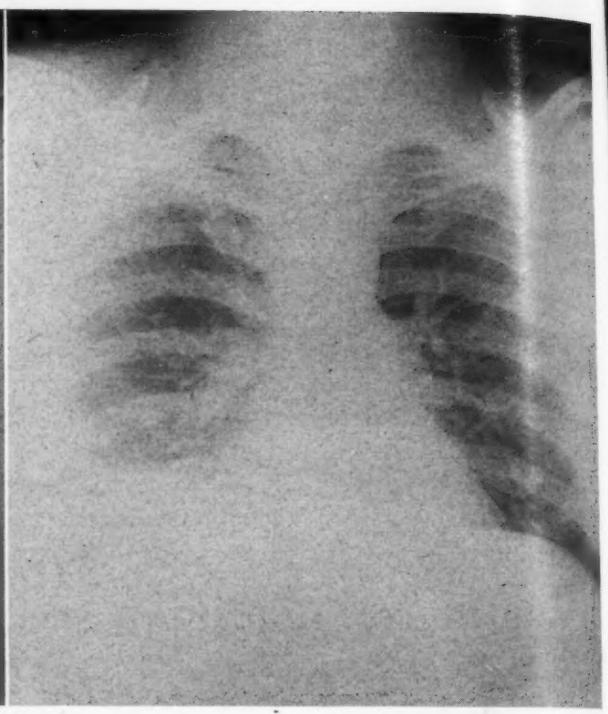


Fig. 2.—Case 1. Roentgenogram of chest taken September 23, 1946, showing marked improvement (following use of emetine only).

after general systemic symptoms. Thirty-three per cent presented pulmonary symptoms primarily. "Four syndromes are seen: an acute costal margin syndrome, a chronic costal margin syndrome, an acute pulmonary syndrome, and a chronic pulmonary syndrome." Hepatomegaly is a constant feature. The most characteristic change with subphrenic involvement is elevation and immobilization of the diaphragm in the anterior and medial portion of the lower right chest. (DeBakey[12] considers this pathognomonic of amebic liver abscess with subphrenic involvement.) Night sweats are frequent in the chronic cases. Jaundice may occur.

Treatment

Berne[2] writes that of nineteen cases of amebic liver abscess treated by emetine alone and in eighteen more cases treated with emetine plus aspiration there were no deaths. In twenty-six cases treated surgically there were fourteen cases which received an adequate dosage of emetine; the mortality in these twenty-six cases was 53 per cent. "Surgery is usually necessary in four situations: for safety in exposing left lobe abscess, for . . . rupture (of an abscess), for pyogenic complications in the pleural cavity, and for drainage of amebic abscess complicated by bacterial infection." Ten of the seventy-four cases Berne reports were diagnosed at autopsy.

From the Mayo Clinic, P. W. Brown and C. H. Hodgson[3] have written of amebic abscesses:

> "We have never seen any disease that is so definitely improved by treatment within thirty-six to forty-eight hours as amebiasis after emetine is administered; this improvement is apparent to both patient and physician."

If a draining sinus exists, even if as large as a fist, and if amebae can be demonstrated in its walls, the administration of emetine may produce complete healing with amazing rapidity. Leukocytosis is moderate in amebic abscess; and contrary to general belief eosinophilia is not usually present. Often the neutrophiles are not increased in percentage.

The following cases illustrate many of the clinical problems of diagnosis:

Case 1.—Mr. B. F., a white person aged thirty-three, was a veteran with military service in the South Pacific and a history of malaria and amebiasis in the Service. On July 12, 1946, after having severe malaise and sweats for four days he was hospitalized elsewhere and treated for malaria without relief or improvement. He was admitted to Hackley Hospital, July 20, 1946, with chills, fever, malaise, and pain in the right lower quadrant of the abdomen and in the legs.

There was dullness to percussion and absent breath sounds over the right lower lobe. Urinalysis was negative except for rare granular casts. Complete blood count was negative except for 36.5 thousand leukocytes showing 87 per cent polymorphonuclear cells: sixty-three segmented forms, twenty stab-forms, and four eosinophiles. Blood smears were negative for malaria. Stools were negative for amebae. Chest x-ray showed fluid to the level of the third rib cartilage with possible elevation of the right diaphragm.

Roentgenograms of the lungs, July 23, showed an interlobular collection of fluid on the right. Thoracentesis was done July 25. Straw-colored, cloudy serum was found. Gram stains of smears of this fluid showed Gram-negative bacilli, micrococci, and short-chain Gram-positive cocci; no acid-fast bacilli were found.

The patient's temperature was 103°F. on the day of admission. It was normal three days later. Treatment was by Atabrine gr. iii intramuscularly on the first day, and penicillin thereafter. He was discharged as an improved case of pneumonia on July 29, 1946.

On July 31, 1946, the writer first saw the patient. He had a severe chill and his temperature went from 96°F. to 103°F. He had a profuse sweat. He was very toxic and had severe pain in the right lower chest and lumbar area posteriorly. On August 1, 1946, he was readmitted to the hospital for probable interlobar abscess and empyema.

His admission temperature was normal. His highest temperature in a twelve-day stay was 100.3°F. Chest x-ray showed some clearing of the interlobar shadow, but fluid was persistent to the level of the third rib cartilage.

On August 5, 1946, four preoperative thoracenteses produced only cloudy serum from a thin inter-pleural layer. The pleural fluid was therefore considered to be secondary to a right subdiaphragmatic lesion. In view of the history of amebic dysentery while serving in the South Pacific, and with negative laboratory reports for the tubercle bacillus in the chest fluid, a trial of emetine therapy was undertaken in place of surgical drainage. The patient had his first injection of 1/10 gr. emetine-hydrochloride August 7, 1946, and on the next day he felt and looked like a new man. The emetine was continued, 1 gr. daily, and five days later the patient was discharged from the hospital, well.

Follow-up chest x-ray showed marked clearing of the opacity and marked reduction in elevation of the right diaphragm. He has been clinically well since.

Case 1, a case of amebic liver abscess, is illustrative of the "acute pulmonary syndrome" and of the remarkable curative effect of emetine.

Case 2.—Mrs. M. F., a white person aged seventy-one, had had a gastro-enterostomy for pyloric obstruction in 1940. She was readmitted to Hackley Hospital on January 20, 1947, acutely ill with severe upper abdominal pain, vomiting, cold sweats, and fibrillating heart. She had had a similar attack a few weeks previously at which time her blood pressure had been

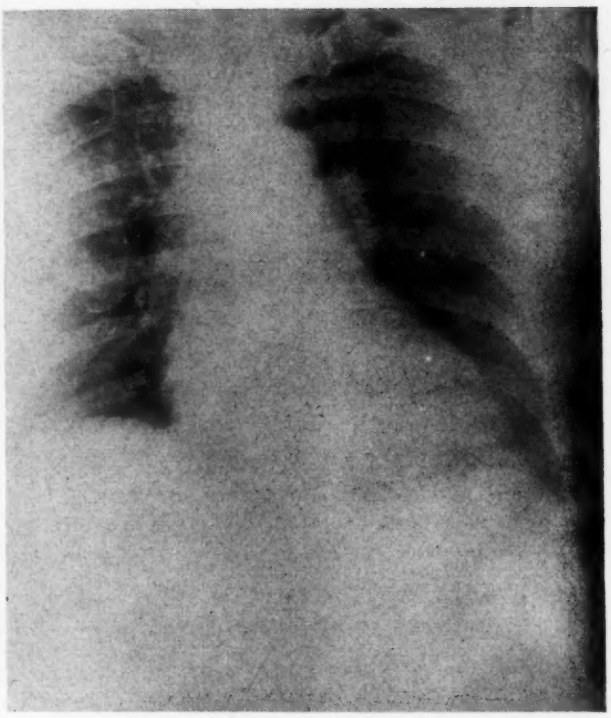


Fig. 3.—Case 2. Roentgenogram of chest showing absence of elevation of right diaphragm.

272/110 and her heart rhythm regular. There was marked tenderness over the gall-bladder area.

The patient's admission temperature was normal, but it climbed steadily to 105°F in fifty-two hours. At this time her leukocyte count was 29.5 thousand showing 92 per cent neutrophiles. Her temperature remained between 100.5°F. and 104°F. for three days, then between 99°F. and 102°F. for one week.

The third day of normal temperature, February 5, while the patient still presented a precarious cardiac condition, the patient's physician undertook exploration of the gall bladder. The writer co-operated. Following separation of dense adhesions under the liver, it became evident that there was a complete, congenital absence of any extra-hepatic gall bladder or vestige of gall bladder. The patient's history and the extent and character of the peri-hepatic adhesions suggested an underlying abscess. A soft area on the anterior and upper surface of the liver was found by palpation. This was aspirated, and thick, yellow-grey pus was obtained. The abscess was unroofed by excising the overlying, semi-necrotic, liver tissue. The abscess cavity was roughly the size and shape of a distended gall bladder. Penrose drains and a strip of gauze were brought out a subcostal stab-wound and the incision was closed. Cultures showed short, Gram-negative bacilli.

The post-operative course was uneventful. The pulse steadied; there was some bile-stained, purulent, and bloody drainage which subsided rapidly; and the patient left the hospital on the eighteenth post-operative day. She has remained well.

Whether this was a true liver abscess, or an empyema of a totally intrahepatic gall bladder, is not important.

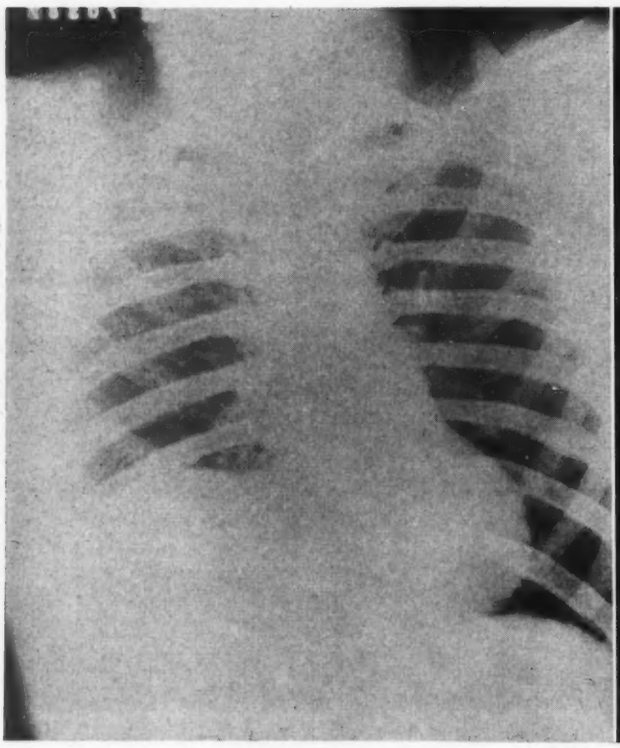


Fig. 4.—Case 3. Roentgenogram of chest taken August 16, 1947, showing marked elevation of right diaphragm and little if any pleural involvement.

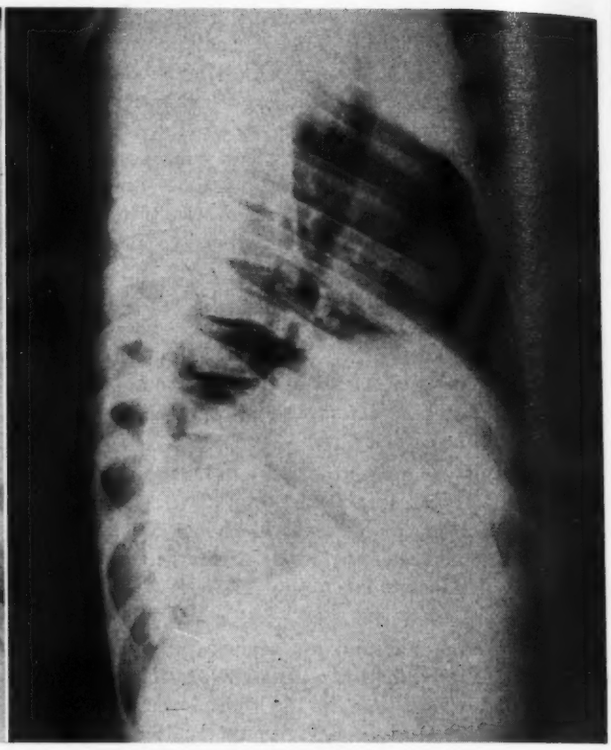


Fig. 5.—Case 3. Lateral rontgenogram of chest showing marked elevation of right diaphragm with clear costophrenic angles.

For all practical, clinical purposes it was a pyogenic, solitary liver abscess, secondary to an acute cholangitis; it was recognized and drained, and the patient rapidly recovered good health.

Case 2, a case of pyogenic liver abscess, presents the acute "right costal margin syndrome" plus other toxic and cardiac symptoms which confused the diagnosis. The improvement following surgical drainage indicates that most of the symptoms were related to the pyogenic liver abscess.

Case 3.—Mr. L. R. C., a negro aged thirty-one, not a veteran, was admitted to Hackley Hospital August 14, 1947, following a fluoroscopic examination of the chest and with a roentgenologic diagnosis of liver abscess after the finding of a high right diaphragm. The following history was obtained: The patient had been seized with a severe chill and a pain in the right side in December, 1946. The pain and chills had been recurring intermittently since and had recently increased in severity. There were marked malaise, anorexia, pain in the right lower lateral and posterior chest on inspiration, and a 35-pound weight loss in the preceding eight months. There was no history of bowel abnormality, nausea, or vomiting. The pain radiated to the right scapula. The patient had lived in Tennessee; he had, by his discomfort, been forced to quit work.

Physical examination was negative except for weight-loss, sunken eyes, and a sub-icteric tinge to the skin. There was tenderness in the right lower lateral and posterior chest on percussion and on finger pressure. There was definite edema over the lower right ribs posteriorly and laterally. The right hypochondrium was tender. Both lungs were full of moist rales. Urinalysis and blood Kahn examination were negative. The leukocyte count was 19.8 thousand showing 90 per cent neutrophiles with 4 per cent stab-forms. There was a moderate secondary anemia. Hematocrit test showed 29.6 per cent packed cells. The icterus index was 7. An indirect van den Bergh test showed 2 milligrams of bilirubin. Plasma protein was 7.42 grams per 100 ml.

In view of the likelihood of an amebic infection, the patient was given emetine. After the fourth daily injection of emetine, the temperature, which had been running from 96°F. to 102°F. daily with a concomitant pulse rate of 96 to 100, became normal. The pulse leveled off between 80 and 100. Blood cultures showed staphlococci. But the patient's pain, rales, cough, and malaise continued as did the local swelling of the panniculus over the right lateral and posterior lower ribs and interspaces. Sweats recurred. The picture was suggestive of some of the atypical malaria cases encountered in the South Pacific, and in spite of four negative malarial smears, atabrine and quinine were both given. Their administration demonstrated nothing. Chest roentgenogram on August 16, 1947, showed the right diaphragm smoothly rounded and elevated to the eighth rib posteriorly. Lungs and pleurae were negative.

The morning of August 22, after severe right upper quadrant cramps, the patient was relieved of pain, had a short episode of diarrhea, and "felt the best he had in

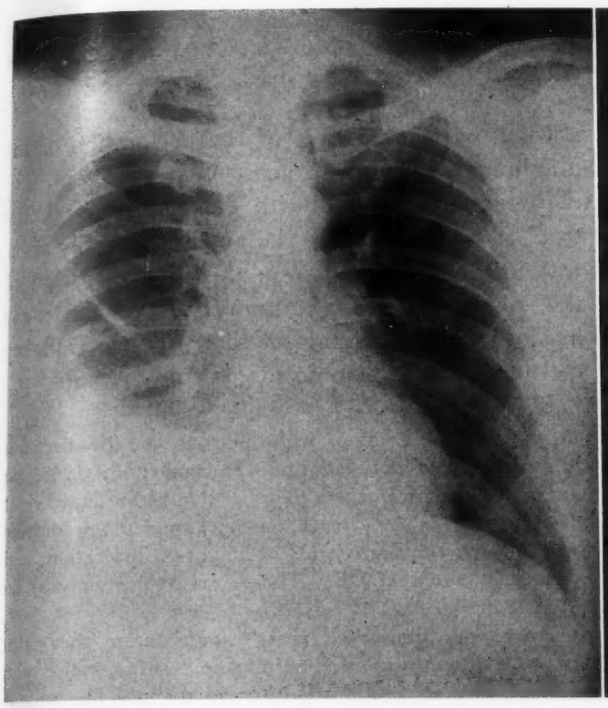


Fig. 6.—Case 4. Roentgenogram of chest showing marked lateral elevation of right diaphragm.

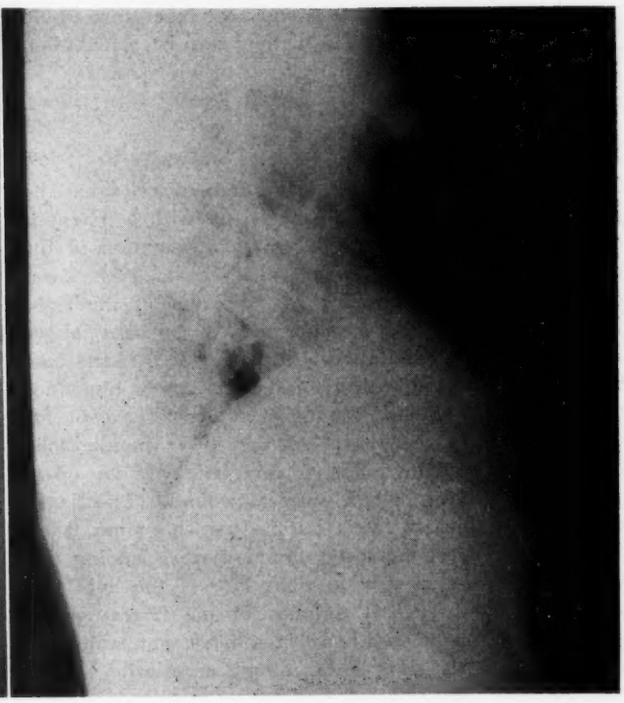


Fig. 7.—Case 4. Lateral roentgenogram of chest showing anterior elevation and fixation of right diaphragm with clouding of the anterior costo-phrenic angle.

months." He had been scheduled for surgical exploration that day, but because this new episode was interpreted as a spontaneous drainage of a liver abscess through the bile ducts and bowel, surgery was postponed and the patient was observed. His chills, sweats, and pain recurred during the next few days. On August 28, fluoroscopy showed lung tissue extending well down into the costophrenic angle with free descent of the right elevated diaphragm on inspiration.

On August 30, the patient was explored through an oblique incision just below the right costal margin. The anterior surface of the liver was greatly increased in extent, but all was normal until the exploring hand found it impossible to get between the liver and the diaphragm posteriorly due to heavy adhesions. A very long, thickened appendix filled with fecaliths and lying laterally, adherent in the posterior gutter, could be palpated and visualized extending up to the posterior margin of the liver. This suggested the possibility of a primary appendicitis and a liver abscess secondary to it. Because the liver, or subdiaphragmatic abscess, appeared to be pointing posteriorly, and because it was technically unwise to attempt appendectomy through the high incision, the belly was closed. The patient was turned and the right eleventh rib was resected. In spite of the edema of the panniculus and overlying tissues, the subjacent costal-parietal and diaphragmatic-parietal pleura were thin and transparent and moved freely against each other with respiration. The above-mentioned pleurae were sewn together and to the diaphragm to prevent contamination of the pleural cavity. The wound was packed with gauze and left open. Four days later the diaphragm was incised through the prepared approach, and a large liver abscess was drained of yellow, flocculent pus which was sterile on culture and negative on examination of stained smears. A large rubber tube was left in place. The patient improved steadily and was discharged twelve days postoperatively, ambulant, with a small residual cavity which soon closed completely. The patient returned to his former occupation as a foundry worker.

Whether or not this was an amebic abscess or a pyogenic abscess is pure conjecture. The type of pus obtained was quite like that described by S. W. Harrington[5] in some of his amebic cases. Perhaps if preparations made from scrapings of the abscess wall had been examined, amebae might have been demonstrated. However, the patient had had emetine therapy as well as antibiotics. His excellent clinical response to emetine, and the type of glary, flocculent pus plus the negative culture of the pus incline the writer to classify this case as one of amebic hepatic abscess cured by the use of emetine and surgical drainage.

Case 3 is a chronic liver abscess with presenting symptoms so vague that the patient had continued working for six months. It presents the "chronic pulmonary" and "chronic costal margin" syndromes. Emetine was helpful, but surgical drainage was required.

Case 4.—Mr. C. L., a white person aged thirty-seven, entered Hackley Hospital, October 31, 1947. On September 30, 1947, he had had an appendectomy elsewhere, shortly after he had been seized with a severe pain in the right abdomen. He developed a postoperative fever. His wound partially opened, and on three occasions there were sudden large evacuations of pus

from it. He would feel better, and his temperature would subside—only to recur. The patient had been ambulant for two weeks, running a daily fever of 100°F. to 101°F., but he had been eating well and feeling well; bowel function had been normal.

Roentgenological examination on October 30, 1947, had shown marked elevation of the right diaphragm. The patient was then referred to the writer with a diagnosis of right subdiaphragmatic abscess. Examination of the chest was negative. Normal expansion of both lower costal margins was present. On percussion, the right lung base was elevated anteriorly two inches above normal and was fixed. Posteriorly the right lung base was normally placed with a normal descent of resonance on inspiration. Breath sounds were normal except for their absence in the region of the lower middle lobe on the right. The abdomen revealed only an open, granulating McBurney-type surgical wound. The finger determined an intact fascia but no palpable sinus tract. However, a curved hemostat found a tract leading upward toward the liver. No right lobe of the liver was palpable, but there was dullness in the lateral gutter region, while there was bowel resonance extending for 2 inches above the right costal margin anteriorly.

Urinalysis and blood examination were negative except for a blood count of 12.2 thousand leukocytes of which 45 per cent were netrophiles. Antero-posterior and lateral roentgenograms of the chest showed a "soft tissue mass in the anterior, lower right chest, most probably below the diaphragm." For the first two days after admission, the patient looked and felt well, and his temperature did not exceed 99.2°F. He was ambulant with no wound drainage; but on the third day he again experienced a sudden gush of pus from his open appendectomy incision.

On November 3, 1947, exploration was done through an upper right rectus incision. The preoperative diagnosis was postappendectomy intra-abdominal abscess with inadequate spontaneous drainage. The belly was filled with adhesions, but there was no sign of an abscess anywhere except for dense, recent, fibrino-fibrous adhesions between the anterior liver surface and the diaphragm, indicative of recent infection. The anterior liver border lay 2.5 inches above the right costal margin. The adhesions between the liver and diaphragm were separated up to the coronary ligament, but no actual pocket was encountered, although the exploring fingers in the abdomen reached the level of resonant lung base determined by preoperative chest percussion. Operation consisted of establishing direct drainage of the subdiaphragmatic, supra-hepatic area through the incision. The patient's postoperative course was uneventful; then about forty hours postoperatively he suddenly coughed up and expectorated a large amount of "pus-like mucus mixed with blood." His temperature, which had been 101°F. since surgery, dropped to normal, where it remained. He left the hospital walking and well on the fourteenth postoperative day. There was no further drainage of pus from his appendectomy wound which healed by normal secondary intention.

The patient has remained well since. He resumed his work two months after spontaneous drainage of the subdiaphragmatic abscess via the two routes: (1) abdominal incision and (2) the tracheo-bronchial tree. Cultures of the exudate were not obtained.

Case 4 is an example of the perforation of the diaphragm by pus burrowing from a subdiaphragmatic abscess with drainage through the tracheo-bronchial tree. The abscess probably never was intrahepatic, although the high elevation of the right lung base, anteriorly, and the x-ray findings closely resembled those which DeBakey feels are pathognomonic for amebic liver abscess.

Case 5.—Mr. L. M., a white person aged fifty-five, was admitted to Mercy Hospital, November 3, 1948, on complaint of pain in the axillary region of the lower right chest; shortness of breath; a hacking, non-productive cough which was paroxysmal at height of inspiration; and a fever of about 100°F. There was no hemoptysis; no pneumonia.

There was diminished chest expansion on the right. In the right postero-inferior lung field a few moist rales were heard, and tactile fremitus was absent. The patient had had chronic urethral stricture since age 22, accompanied by multiple perineal abscesses and multiple dilatations and a posterior urethrotomy. He had had urethral dilalation a few days before hospitalization.

No acid-fast bacilli were found in his sputum; sputum culture and animal innoculation were negative. Urinalysis demonstrated 40 to 50 leukocytes per high-power field, but was otherwise negative. Blood examination showed 3.59 million erythocytes and 13 thousand leukocytes of which 80 per cent were polymorphonuclear. Roentgenograms made November 3, 1948, showed increased opacity at the base of the right lung extending up to the fourth anterior rib in the antero-posterior view. In the lateral view opacity was localized to the posterior one half of the chest, apparently over the lower lobe. The roentgenologist's impression was that fluid, probably encapsulated, lay at the right base.

A diagnosis of empyema was made, and on November 13, 1948, thoracentesis was performed, entering through what was believed to be the ninth interspace in the midscapular line. Fifteen ml. of thick grey pus were removed. For three days following thoracentesis the patient's fever continued around 101°F. Blood examination showed 3.35 million erythrocytes and 21.8 thousand leukocytes of which 82 per cent were polymorphonuclear.

Surgical consultation was obtained November 17, and a diagnosis of probable lung abscess, right lobe posterior, was made; exploration and drainage were recommended. Before surgery, November 18, the point where the previous thoracentesis was made was found to be the eleventh interspace instead of the ninth interspace. The diagnosis was immediately changed to septic liver abscess. Two inches of the twelfth rib were resected, and non-odoriferous, creamy, greenish pus was drained from a large liver abscess. Two 3/8-inch rubber drains were brought out and secured by a stitch through the skin, and the wound was loosely closed. Beta-hemolytic streptococci were cultured from the pus.

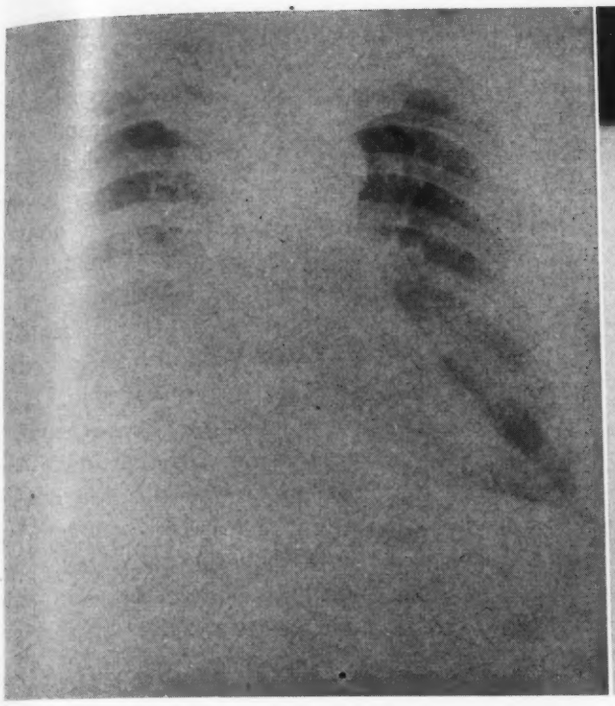


Fig. 8.—Case 5. Bedside roentgenogram of chest taken November 3, 1948, showing increased opacity, probably fluid, over the right lower lobe.

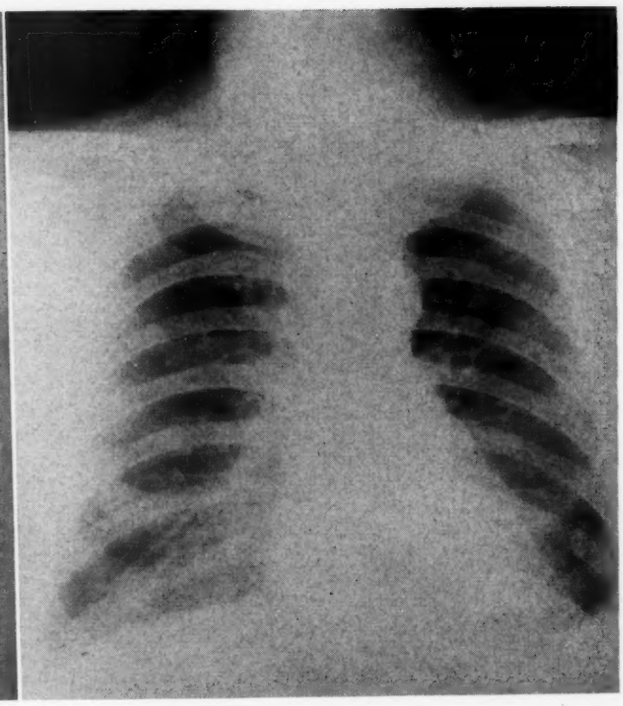


Fig. 9.—Case 5. Roentgenogram of chest taken April 5, 1949, showing complete clearing of the right pleural space and costo-phrenic angle (following surgical drainage of the underlying pyogenic liver abscess).

The patient's temperature dropped following drainage of the abscess, and his general condition improved markedly. Roentgenograms made November 30 with contrast medium injected into the drains demonstrated no residual cavity and no fistula; other findings were negative. The patient was discharged on December 6, 1948, ambulant, with no residual cavity but that immediately around the shortened drain tubes.

Mr. L. M. was rehospitalized at Mercy Hospital, January 22, 1949, on complaint of fever. The drain-sites had healed, pushing out the drains. Another abscess was forming at the site of the previously drained abscess. No roentgenograms were made. Blood counts were negative. Urethral stricture and heavy pyuria were then being treated by a urologist. A preoperative diagnosis of recurrent liver abscess with inadequate drainage and possible osteomyelitis of rib 12 was made. Operation on January 24 revealed no osteomyelitis but did show a small abscess cavity, of one or two ounce capacity, in the liver and arrived at by probing along the old drain tract. An opening admitting two fingers was made to the small abscess, which was then packed with gauze. Postoperative recovery was rapid and uneventful; the patient was discharged January 27, 1949, ambulant.

Three months later, on March 15, 1949, Mr. L. M. was admitted to Hackley Hospital with complaints of fever; disorientation; vertigo; severe, persistent headache; a hacking, non-productive, persistent cough; and athetoid movements. A brain abscess was suspected as a possible sequel to his liver abscess. No supportive laboratory or further physical findings confirmed this diagnosis. Chest x-rays disclosed bilateral pneumonia. The patient's progress was uneventful on penicillin therapy. Final diagnosis for this hospitalization was bronchopneumonia.

This third hospitalization presented opportunity to re-examine the drainage site of the liver abscess. This was probed, but there was no evidence of pus-pocket formation, and at termination of hospitalization the drainage site was completely healed. Roentgenograms made March 29, 1949, showed clearing of pneumonitis; those made April 5, 1949, showed a symmetrical chest with a clear right costophrenic angle and no evidence of elevation or fixation of the right diaphragm.

Case 5, a pyogenic liver abscess, presumably secondary to urethral instrumentation, presented the "acute pulmonary syndrome." The patient was treated as a case of empyema thoracis for the first five days of his first hospitalization. The final chest x-ray shows how completely the right diaphragm returned to normal after surgical evacuation of a huge intra-hepatic, pyogenic abscess.

Case 6.—Mrs. E. F., a white person aged seventy-four, a bedridden, obese, arthritic invalid, was hospitalized with a diagnosis of pneumonia of the right lung on January 12, 1948. Roentgenograms on that day showed marked elevation of the right diaphragm, plus a pneumonia of the right upper lobe.

Roentgenograms made January 20, 1947, showed a "tremendous elevation" of the right diaphragm to the

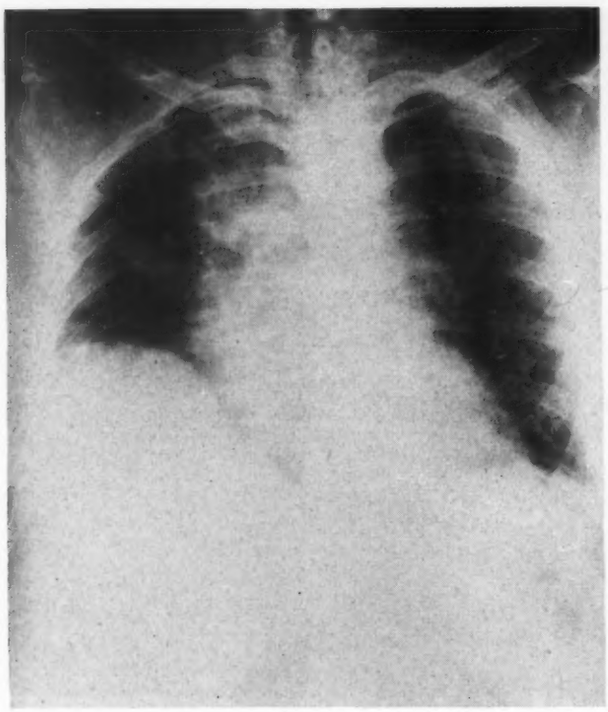


Fig. 10.—Case 6. Roentgenogram showing very marked elevation of the right diaphragm (secondary to bodybuild, obese belly, and prolonged supine posture).

level of the third rib anteriorly. The patient's temperature had hovered between 100°F. and 101°F. for nine days when the writer first saw her on January 21, 1948. Examination at that time showed persistent rales throughout the right lung, good pulmonary descent on inspiration, and no palpable liver. The patient had an unusually broad and deep lower thoracic cage and a remarkably firm, tense, rotund, and obese belly. Fluoroscopy the following day revealed: "the excursion of the diaphragm was equal on the two sides, and it is apparent that the right diaphragm is elevated due to a subdiaphragmatic mass." The patient's erythrocyte count had dropped from 3.4 million to 2.9 million, and her leukocyte count had risen from 14 thousand to 19.4 thousand. Penicillin was being administered. The diagnosis of the attending physician, supported by radiological findings, was subdiaphragmatic abscess.

However, the consulting surgeon tendered the opinion that there was no liver or subdiaphragmatic abscess. The patient's fever was thought to be most probably the effect of the residual pulmonary inflammation. The elevation of the right diaphragm was believed to be explained by: a wide lower thoracic cage; the patient's supine position; a relatively small subjacent liver; the pressure of the rotund and obese belly; and increased intra-abdominal pressure due to some gaseous distention of the bowel. Without surgical intervention, the patient recovered a normal temperature on January 26 and went home fully recovered on February 1, 1948. She remained well until death from unrelated causes two years later.

Case 6 is reported because it presented the roentgenologic findings for liver or subdiaphragmatic abscess plus many of the clinical findings to substantiate either diagnosis. This case demonstrates the importance of evaluation of the clinical situation. The wide, funnel-shaped flaring of the patient's lower thoracic cage plus her orange-shaped, very tense belly crowded with fat and bloated with gas were deemed to be sufficient, in view of her constant horizontal position, to have pushed her liver and diaphragm higher in her chest than they would have normally lain. This explanation for the x-ray findings gave reason for avoiding surgery and for believing that in spite of the x-ray findings, the picture of infection was all pulmonary. The soundness of this judgment was confirmed by the fact that she recovered spontaneously and remained free of further symptoms referable to any subdiaphragmatic or liver lesion.

Case 7.—Mr. E. L., a Negro aged fifty-one, was admitted to Hackley Hospital, January 10, 1948, with a diagnosis of pneumonia of the right lung base. He had become ill with chills and fever, dyspnea, profuse perspiration, cough, and severe general malaise while driving home from the South. Upon admission his respirations were 30, but his pulse and temperature were normal throughout his twenty-day stay in the hospital. There was pain in his right chest and shoulder. Chest expansion was bilaterally equal, and there were moist rales and decreased breath sounds at the right base. The abdomen was negative. Urinalysis was negative except for albumin grade 1-plus and the presence of 15 to 20 leukocytes per high-power field. Erythrocytes numbered 4.96 million; there were 17.5 grams of hemoglobin; leukocytes numbered 16 thousand with 65 per cent segmented forms and 13 per cent stab-forms. Two warm stool examinations were negative for pus, parasites, or ova, but were strongly positive for occult blood.

The roentgenologist's report of the chest x-ray taken January 10 stated, "Extensive pneumonitis, right base, but a subdiaphragmatic lesion would produce the same picture." Ten days later roentgenograms showed "a marked elevation of the right diaphragm with some atelectasis of the right lower lobe, apparently due to compression due to elevation of the right diaphragm. This suggests a subdiaphragmatic lesion, possibly a liver abscess." Fluoroscopy on January 23 showed "excursion of the right diaphragm equal to that on the left. Impression: subdiaphragmatic tumor."

Surgical consultation was obtained January 28. The liver was neither enlarged nor pushed downward. The area of elevated diaphragm by x-ray corresponded with a triangular area at the right lateral base which was flat to percussion and was devoid of breath sounds. The laterally elevated diaphragm was therefore thought to be due to pleural adhesions, pulmonary in origin. In

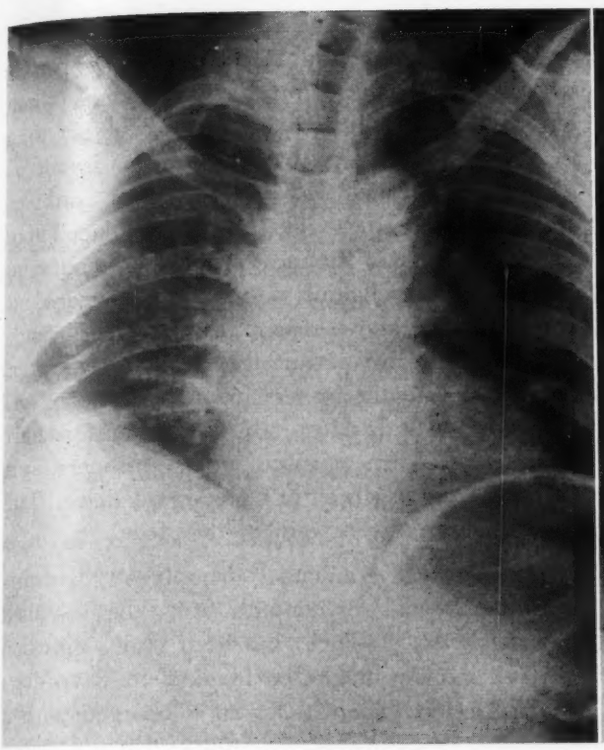


Fig. 11.—Case 7. Roentgenogram of chest showing elevation of right diaphragm with local pulmonary involvement.

Fig. 12.—Case 7. Lateral roentgenogram of chest showing angular elevation of right diaphragm.

view of the normal temperature, pulse, and respirations, and the apparent pleural adhesion to the diphragm, the elevation of the right diaphragm could be satisfactorily explained without reference to the liver or the subdiaphragm. The patient was therefore dismissed without surgery, January 30, 1948. He has been well since except for another episode of pneumonia in 1951 at which time both costo-phrenic angles appeared normal in the roentgenograms of his chest.

Case 7 presents adequate x-ray and physical findings to suggest a diagnosis of liver or subdiaphragmatic lesion. This case also presents the "acute pulmonary syndrome." But the absence of fever militated against the presence of any liver or subdiaphragmatic lesion adequate to induce as much right lower lung pathologic change as was evident in the x-rays. Virus pneumonia frequently runs an afebrile course. For this reason, the suggestion of a primary, subdiaphragmatic lesion was discounted, and the diagnosis of virus pneumonia, only, was made. The wisdom of this judgment was substantiated by the patient's favorable progress without surgery.

Bibliography

1. Beaver, M. G., Davis, P. B., and Smith, R. S.: Hepatic abscess secondary to perforated duodenal ulcer. Northwest Med., 45:94-96 (Feb.) 1946.
2. Berne, C. J.: Diagnosis and treatment of amebic liver abscess. Surg. Gynec. & Obst., 75:235-238 (Aug.) 1942.
3. Brown, P. W., and Hodgson, C. H.: Late results in treatment of amebic abscess and hepatitis of the liver. Am. J. M. Sci., 196:305-313 (Sept.) 1938.
4. Haga, J.: Liver abscess perforating into the right lung. Med. J. Australia, 1:170-172 (Feb.) 1942.
5. Harrington, S. W.: Amebic hepatic, subphrenic, and pulmonary abscesses. Arch. Surg., 21:1146-1160 (Dec.) 1930.
6. Hartz, M. S.: Liver abscess with perforation into lung. J. Mt. Sinai Hosp., N. Y., 13:136-139 (Sept.-Oct.) 1946.
7. Hays, T. G., Brown, R. B., and Godfrey, E. W.: Liver abscess. U. S. Navy Med. Bull., 48:7-21 Jan.-Feb.) 1948.
8. Kisner, W. H.: Solitary pyogenic abscess of the liver. Am. J. Surg., 73:510-518, 1947.
9. MacCarty, R. B., and Schnedorf, J. G.: Conservative treatment of a chronic amebic liver abscess complicated by rupture and an intra-peritoneal abscess. Am. J. Surg., 71:401-405 (March) 1946.
10. MacKenzie, W. C., and Gray, H. K.: Single pyogenic abscess of the liver: Report of a case. Proc. Staff Meet. Mayo Clinic, 12:596-599 (Sept.) 1937.
11. McGee, C. J., Priest, W. S., and Schimoberg, A.: Pylephlebitis and pyogenic liver abscess. Am. J. Surg., 74:194-199 (Aug.) 1947.
12. Ochsner, A., and DeBakey, M.: Amebic hepatitis and hepatic abscess, an analysis of one hundred eighty-one cases with review of the literature. Surgery, 13:460-493, 1943.
13. Tearnan, R. A.: Multiple liver abscesses. Illinois M. J., 68:419-425 (Nov.) 1935.
14. Walters, W., et al: Amebic abscess of the liver unsuspected until perforation. J.A.M.A., 125:963-966 (Aug.) 1944.
15. Yater, W. M., and Cavanagh, J. R.: The diagnosis of solitary liver abscess by means of thorotrast hepatosplenography. Ann. Int. Med., 11:404-409, 1937.

Notes on New Sex Offender Legislation

By Donald M. D. Thurber

Detroit, Michigan

LATE IN 1949 Governor Williams appointed a twenty-two member Commission to study the problems presented by the sex deviate and the sex offender and to make recommendations for appropriate reforms. The Commission, under the chairmanship of Reverend Father Ralph M. Richards, of Saginaw, contained four members of the Michigan State Medical Society. They were Dr. Raymond W. Waggoner and Dr. Ralph D. Rabinovitch, both of Ann Arbor, Dr. P. C. Robertson, of Ionia, and the late Dr. Samuel W. Hartwell, of Lansing. In addition, Dr. Thomas J. Heldt, of Detroit, served as the liaison representative of the Society to the Commission. The Commission issued a lengthy report of its findings, which became the basis for several important enactments in the 1952 session of the State Legislature. The Commission has now been discharged by the Governor.

An amendment to the Hospital Act for Mentally Diseased Persons permits for the first time petitions to be filed in probate court for the commitment to mental hospitals of persons whose sexual behavior conforms with the definition written into the law. Petitions "may include persons whose sexual behavior is characterized by repetitive or compulsive acts which indicate a disregard of consequences or the recognized rights of others, or by the use of force upon another person in attempting sex relations of either a heterosexual or homosexual nature, or by the commission of sexual aggressions against children under the age of sixteen." Medical testimony must be heard, just as in petitions for the commitment of the mentally ill. Such a petition for commitment may not be considered if any criminal proceeding based on sexual behavior is pending against the person named in the petition. Furthermore, the petitioners are limited to the person himself, the prosecuting attorney, the next of kin over twenty-one years of age, the legal guardian, or the person's counsel. The intent of the law is to encourage the voluntary commitment of persons who may not have committed any actual crimes, but of whose ability to behave acceptably there is serious doubt. As worded, the law is not intended to provide a substitute for ordinary criminal proceedings. The limitations placed upon the petitioners are for the purpose of discouraging captious and vengeful petitions by persons not having a true knowledge of the facts. The new language will also permit the transfer of selected sexually deviated prisoners from the State prisons to the Ionia State Hospital. Such transfers have hitherto not been possible unless prisoners were suffering from psychosis or feeble-mindedness. This law has been given immediate effect.

Another bill amends Michigan's existing Criminal Sexual Psychopath Act, the so-called "Goodrich Act." There has been some confusion whether the law might be invoked in Recorder's Court, Detroit, when a person is charged with a misdemeanor. One of the amendments now clarifies the procedure by specifically including misdemeanors. The former insistence upon full and permanent recovery as the criterion for discharge after commitment has been modified by the use of the words, "has recovered from such psychopathy to a degree that he will not be a menace to others." Furthermore, the words, "reasonable grounds to believe that such person has recovered," have now been inserted in other sections of the Act. The new wording is helpful and realistic in that it conforms with what is, in fact, the practice at the present time.

Three additional bills which, together with the amendment to the "Goodrich Act" become effective in September, provide the State with new machinery for the processing of convicted sex offenders. A sexually delinquent person is defined, the definition being the same as that given above in the Hospital Act for Mentally Diseased Persons. The definition is so worded that the commission of sex crimes involving force or perpetrated against children is prima facie evidence of sexual delinquency. The prosecutor elects whether to charge sexual delinquency as an additional count. If a finding of sexual delinquency is returned by the court or jury, together with a conviction on the substantive crime, the sentencing judge may in his discretion impose any sentence now provided by law for the particular sex crime or he may impose an indeterminate sentence which shall have

Mr. Thurber is recent Executive Director of the Governor's Study Commission on the Deviated Criminal Sex Offender.

a minimum of one day and a maximum of life. The crimes which are made subject to the new option are the various assaults with sex intent, sodomy, incest, indecent exposure, sexual assaults and attempts against children, gross indecency, and rape. Provision is made for expert examination and testimony in the court proceedings. A psychiatric clinic is set up in the Department of Corrections, which must provide treatment for and periodic review of all sex offenders sentenced indeterminately. It may also extend treatment services, to the limit of its ability, to other types of prisoners. Authority to parole or discharge indeterminately sentenced prisoners is vested in the Parole Board, which must review the status of each such prisoner and the data presented by the psychiatric clinic not less than once every six months. A satisfactory parole period must precede the outright discharge of an indeterminately sentenced prisoner. If such a prisoner has not been paroled or discharged within three years after the beginning of his imprisonment, he may petition the sentencing court for a hearing at which he may introduce evidence tending to show his recovery. He may make such a petition every five years thereafter so long as he remains in custody. The sentencing court or jury may determine from the evidence available to it and from the testimony of expert examiners whether the prisoner has been sufficiently rehabilitated so that he may be released without danger to himself or to society. The objective of the optional indeterminate sentence and its accompanying features is to make easier the selection by the courts of individuals who will benefit from treatment of indeterminate length or whose removal from society is indicated for an indefinite period because of their dangerous condition. Release then depends upon the prisoner's rehabilitation, not upon the automatic passage of a fixed period of time. Incentive to co-operate in a treatment program is thus increased, while at the same time authority is conferred to hold the prisoner for the rest of his life if his condition remains dangerous in the opinion of the Parole Board, acting upon the advice of the psychiatric clinic.

Aside from the main provisions which have been given above, the new laws contain other language which accomplishes minor reforms, additions, and changes too detailed to list in these notes.

The new legislation was introduced by Representatives Howard R. Carroll, of Mt. Clemens, Herb Clements, of Deckerville, and Lloyd Gibbs, of Portland. Representative Carroll also served as chairman of a committee of the Legislature which examined and studied the legislative recommendations of the Governor's Commission and worked with the Commission in putting into final form the bills which were passed.

BREAST CARCINOMA STUDY

(Continued from Page 1316)

3. Geschickter, C. F.: Diseases of the Breast. Second Edition, Lippincott, 1945.
4. Geschickter, C. F., and Burka, P.: Examination and Diagnosis of Mammary Tumors. M. Ann. District of Columbia, 17:441-449, 1948.
5. Harrington, S. W.: Survival Rates, etc., in Breast Carcinoma. Surgery, 19:154 (Jan.) 1946.
6. Hoopes, B. F., and McGraw, A. B.: The Halstead Radical Mastectomy. Surgery, 12:892-905 (Dec.) 1942.
7. Peck, M. E.: Malignant Tumors of the Male Breast. S. Clin. of North America, 24:1108-1125 (Oct.) 1944.
8. Personal Communication.
9. Personal Communication: Dublin, L., Metropolitan Life Insurance Co., New York, New York.
10. Spiegelman, M., and Marks, H. H.: Age and Sex Variations—Diabetes Mellitus. Am. J. of Pub. Health, 36:No. 1 (Jan.) 1946.
11. Warren, S., and Tompkins, V. N.: Significance of Extent of Axillary Metastasis in Carcinoma of the Female Breast. Surg., Gynec. & Obst., 76:327-330 (Mar.) 1943.
12. Waggoner, C. M.: Carcinoma of the Premenopausal Breast. Ann. Surg., 127:1256-1261 (June) 1948.

Early Detection of Cancer

Postgraduate Course

Wayne University College of Medicine offers a Postgraduate course in the early detection of cancer. Three facilities of the College are to be used throughout the year in the presentation of the course: The Yates Memorial Clinic at 4811 John R, Detroit; the Detroit Receiving Hospital; and the Veterans Administration Hospital, Dearborn. The course is scheduled so that it may be taken for the entire year of three quarters, or so that any one quarter may be elected. The course is designed so that doctors of medicine may become acquainted with the means of diagnosis and with the tools of diagnosis which are readily available to them.

The offering for all quarters of the school year is as follows:

First Quarter beginning September 15 and ending December 6, 1952

Monday—Tumor Board Detroit Receiving Hospital	12:30— 2:00 p.m.
Tuesday—Cancer Control Clinic (men) Yates Memorial Clinic	7:00— 9:00 p.m.
Wednesday—Review of Biopsy Slides and Papanicolaou Smears Yates Memorial Clinic	10:30—11:30 a.m.
Friday—Consultation Clinic Yates Memorial Clinic	10:00—12:00 a.m.

Second Quarter beginning December 8, 1952, and ending March 14, 1953

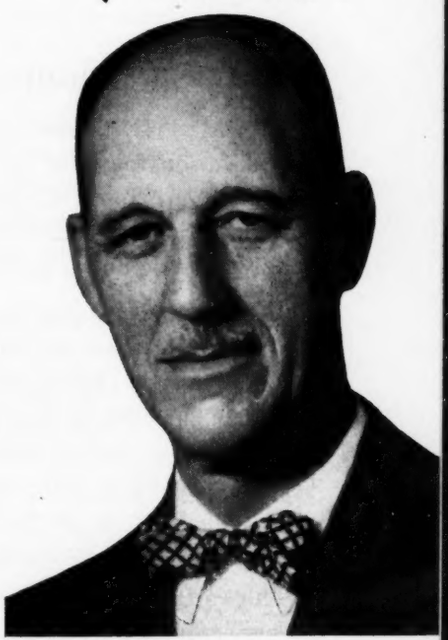
Monday—Cancer Control Clinic (women) Yates Memorial Clinic	3:00— 5:00 p.m.
Wednesday—Review of Biopsy Slides and Papanicolaou Smears Yates Memorial Clinic	10:30—11:30 a.m.
Friday—Consultation Clinic Yates Memorial Clinic	10:00—12:00 a.m.
Friday—Tumor Board Veterans Administration Hospital, Dearborn	3:00— 5:00 p.m.

Third Quarter beginning March 16 and ending June 13, 1953

Wednesday—Review of Biopsy Slides and Papanicolaou Smears Yates Memorial Clinic	10:30—11:30 a.m.
Wednesday—Tumor Clinic Detroit Receiving Hospital	12:30— 2:00 p.m.
Thursday—Cancer Clinic (women) Yates Memorial Clinic	3:00— 5:00 p.m.
Friday—Consultation Clinic Yates Memorial Clinic	10:00—12:00 a.m.

Registration for this course can be made in the office of Postgraduate Medical Education at the College of Medicine, 1512 St. Antoine, Detroit 26. Those wishing to be enrolled for the fall quarter of 1952 must register *before September 13.* Tuition is $50.00 per quarter, and the class is limited to fifteen.

President's Message



We Serve

I wish to avail myself of the just opportunity on the printed page to thank the members of the Michigan State Medical Society for the honor bestowed upon me, and the confidence shown in me, by my elevation to the presidency of your organization. You, of course, are aware that our Society holds an enviable position in the national organization, and there are good reasons for this circumstance. Primarily, and for this we should express our appreciation, we have had many predecessors in our membership of high character and practical vision who could see the possibilities for constructive work by the Society and furthermore were unstinted in their devotion to duty in order to achieve those goals. We still number among our membership many men of the same calibre, and for this I am especially grateful because necessarily the officers of any society cannot take credit alone for the many things accomplished.

In addition, we have been especially fortunate in being able to attract capable men and women to assist us in an excellent capacity, all very loyal employes.

And so during the coming year, I solicit the same interest by and co-operation of the membership, always being mindful of the fact that this is a large organization attempting to serve varying types of communities ranging from densely populated industrial cities to those areas that are sparsely populated and rural in type.

Thank you

R. J. Hubbell

President, Michigan
State Medical Society

Editorial

ACKNOWLEDGMENT

THE EDITOR takes pleasure in rendering credit and commendation to Wm. M. LaFevre, M.D., of Muskegon, Chairman of the Committee on Diabetes Detection of the Michigan State Medical Society, for his splendid work in helping to prepare this edition of THE JOURNAL, the Diabetes Number. Dr. LaFevre has worked for several months, and has selected some good papers covering the disease. He has also contributed an editorial on the subject. We have enjoyed working with him. .

DIABETES IN MICHIGAN

FROM THE figures obtained in surveys made in various parts of the country, it is apparent that there are about 42,000 diabetic persons in the state of Michigan, and another 42,000 people are mildly diabetic but as yet have not been discovered.

In order to stimulate interest among the profession in the problem of diabetes, this issue of THE JOURNAL of the Michigan State Medical Society has been devoted to that subject. The education of the diabetic patient and the control of the disease takes a lot of time on the part of the physician, but there is probably no other disease in which the reward for good care is so great.

The early recognition of the condition gives us an opportunity to institute control at a time when serious complications can be prevented. The American Diabetes Association, the Michigan Diabetes Association, the Subcommittee on Diabetes Control, and the various county medical society committees on diabetes have all worked together for the past several years to produce Diabetes Week. This week is devoted to the encouragement of more diligence in the early recognition of diabetes, and its early control. The program goes on all year and, as a result, each year more and more early cases are discovered. School, pre-employment, life insurance, routine factory, and many other required examinations are continually turning up previously undiscovered cases.

Of utmost importance in this program is the office of the family physician. It is there that the best work can be done in finding the uncontrolled cases. Nearly everyone sees a doctor at least once a year, and making a urinalysis a routine part of the examination of each patient who consults him will do much to aid this program.

It is the duty of each of us in the profession to do our part in the prevention of the complications which so often result from lack of early control of the disease.

WM. M. LEFEVRE, M.D.
Chairman, Sub-committee on Diabetes Control
Michigan State Medical Society.

TO A BETTER LIFE—SOCIAL PROGRESS, NOT SOCIALISM

EVERY MOVE toward the betterment of the conditions of the people as a whole is an advance in social progress. The fundamental needs of people are, first and foremost—food, clothing and housing. These are the bare essentials. To them must of necessity be added health, for without health no present good would come of the other three.

Another item is material to all progress—skills. Without skills no progress worthwhile would redound to the benefit of persons who make up any community. These five attributes, food, clothing, shelter, health, skills, are accepted and enjoyed. They are the result of individual and independent action. They are the foundation of our civilized life.

From this beginning, all progress must come. Government through its directors, dictators or bureaucrats has seized upon these basic needs of people and directed their distribution in its own fashion. Sometimes this has been good, sometimes it has seemed to favor certain special groups. There is one fact, however, to remember—individual skills—not Government—create these basic needs of the human race. Government took what was already there, modified it, divided it, or wasted it, and added its own parasitic costs to the whole, then gave back what was already the perquisite of the people.

It is unfortunate that the terms "socialism" and

"social progress" have become of common use. We confuse and misunderstand them. Socialism is the picture we have just given in which government looks after its people's needs with their own goods, which it has taken. Social progress is that situation where, by their own efforts, and their neighbor's help, the people spontaneously build to a better life.

TO A BETTER LIFE

NOT SO LONG ago the great masses of people lived in want. If employed, they worked long hours for little pay. They were able to furnish the bare necessities for their families. Some of our recent forebears lived when the world was just beginning to appreciate the value of individual effort. People were learning that by voluntary work and industry they could procure the necessities and some of the luxuries which their families had known only vicariously for ages.

Our ancestors and our immediate forebears strove diligently for every advantage and to provide better food, clothing, shelter and health. Most houses had absolutely no facilities; toilets, plumbing, central heat, running water, electric power, gas, telephones have all come to us within the memory of our elder doctors of medicine. Our people worked, sacrificed, and finally accomplished a social revolution of living that is absolutely incomprehensible to the younger generation.

In those days, doctors of medicine were few and far between. They had some education, but a world of understanding and a willingness to do what they could to relieve suffering. They traveled long distances by horseback, or as best they could, and carried with them whatever might be needed for the patient.

The desire for a more abundant and satisfactory living stimulated the world to improve what it had, to seek for newer methods and conditions. Better housing, conveniences, food and clothing were the ambition of each household. The growth in social and economic stature was slow at first, but steady. Our fathers and grandfathers were self-sufficient, determined, independent and proud to see their families constantly striving for better and more abundant living conditions. This was social advance, a step to a better life.

Early members of the medical profession took stock of their capabilities and shortcomings. They recognized the utter inadequacy of the medical schools and were instrumental in improving the old, starting new, doing away with the frank diploma mills, and finally, early in this century, succeeded in setting up a set of standards and ratings which made the medical colleges of the United States the best in the world. This produced a tremendous advance in the general level of medical knowledge and skill.

Pioneer families were now able to have reasonably good food, clothing, housing, and health security. It was vastly better than in the old feudal days when only the master, the overlord or the wealthy were secure in their health needs or even able to employ doctors. The costs of better living, including health care, were high for the times, and getting higher. Socially minded persons began doing something tangible.

A committee was appointed to study the costs of medical care. This committee made a report that the costs were high, and some of its members began suggesting the idea that the solution could be for federal control. Great Britain adopted the scheme for a limited, but rather large, segment of her people.

For the past few years, the urge to take over the health services of our nation by the bureaucrats of the federal government has been a never-ceasing threat to the natural and orderly progress of national betterment in every essential need of the people. Bill after bill, plan after plan, speeches and accusations, and vilifications of the medical profession—we have had them all.

The social planners kept proposing one new federal scheme after another. The grass roots of the profession from Texas, Oregon, Washington, Michigan, California, the men in contact with the suffering public, whose patients wanted health care and were willing to pay for it to the best of their ability, these medical men began toying with the insurance principle. Could some plan be provided whereby those persons willing to do so could contribute to a fund which would care for the costs of serious catastrophic illness? The Blue Cross and Blue Shield evolved.

The success of these movements has been so overwhelming that the advantages of good health care need not be foregone by anyone who wishes to use them. The Blue Cross and Blue Shield plans are now available to everyone with an income. The very best possible medical and hospital care is on call now to over eighty-five million persons,

well over half of the total population of the United States. This is another long step in the social progress of the nation to—a better life.

At the present time there seems to be a lull in the planned program. Both political party platforms have clauses against "Socialization of Medicine" and both party nominees have expressed themselves as against "Socialized Medicine."

One would think we might have a rest and be allowed to iron out some of the unintentional and unmistakable inadequacies which have become manifest in our voluntary health plans due to the necessity of development in a new and untried field.

But, no. No time is given to readjust, to resurvey, and to work for safety and security. The President appointed a commission to study the whole field of medical and hospital service plans, the furnishing of adequate health care to the whole population with orders to bring in a report with definite recommendations. He hoped by this move to remove the question of socialized medicine from the political campaign. The American Medical Association promptly branded this commission a political move.

The President's commission has held regional meetings with interested groups allowed to make statements. Notice to some interested medical groups for some reason failed to come or came late. In his broadcast of September 9, Gun Nunn ("Labor Views the News") said that Labor's representative at the meeting in Minneapolis, September 2, 1952, proposed that the Federal Government administer all health services, with the doctors on salary, because every time labor gets an increase in wages they lose their advantage on account of prompt increases in fees by the doctors. This socialized medicine problem is not dead.

There has also been appointed a Commission on Financing of Hospital Care. Due to many causes, the costs of hospital care have advanced alarmingly to the point of grave emergency, causing a spontaneous protest of hospitals and hospital patients and their families. This commission is an independent non-government organization originally sponsored by the American Hospital Association, to report directly to the public. It is financed in its $500,000 budget by The Health Information Foundation, Milbank Memorial Fund, National Foundation for Infantile Paralysis, Rockefeller Foundation, W. K. Kellogg Foundation, and John Hancock Mutual Life Insurance Company. Others have been invited to contribute: The Michigan State Medical Society, the Blue Cross and Blue Shield plans.

All progress in the medical, scientific and economic field has been a growth of the natural urge and desire of our doctors of medicine and our people to provide and to receive the very best, the needful, and the obtainable benefits of the unprecedented advances of science during the last half century. This is another step in the gradual advance to a better life.

MICHIGAN IN LEADERSHIP

MICHIGAN has two members of the Commission on Financing of Hospital Care: Robin C. Buerki, M.D., Detroit, Executive Director, Henry Ford Hospital; and William S. McNary, Detroit, Executive Vice-President of Michigan Hospital Service. The staff Director is Graham Davis of Battle Creek, Past President of the American Hospital Association, on loan from the W. K. Kellogg Foundation, who is at present supervising the study in North Carolina. Mr. Davis, trained in hospital management, spent ten years with the Duke Endowment, and ten years with the W. K. Kellogg Foundation. The Assistant Director is Harry Becker, of Detroit, a member of the Board of Trustees of Michigan Hospital Service and the Board of Directors of Michigan Medical Service. Mr. Becker graduated as M.A. in public administration, University of Nebraska, Post Graduate Yale School of Public Health, Columbia University, and the New York School of Social Work. He was Director of Child Welfare and Services to Crippled Children, Nebraska, 1935-41; Technical Advisor, USPHS, 1941-48, and Director of the Social Security Department UAW-CIO, 1948 to 1951. The Technical Advisory Committee includes E. Dwight Barnett, M.D., Director of Columbia University Institute of Administrative Medicine, formerly President of Michigan Hospital Service, and Andrew T. Court, Detroit, Economist General Motors Corporation.

At the national level, the study is directed mainly to these four items:

1. What are the elements of hospital costs? Can hospital costs be reduced?
2. How can prepayment plans more effectively serve the public and the hospital?
3. What can we do to provide more adequate financing of hospital care for persons receiving

public assistance and social security benefits? How can we meet more satisfactorily the problems of financing hospital care for the low income and rural families?

4. What can physicians and hospitals do, working together, to bring higher standards of care to the public, and, at the same time, keep costs as low as possible?

There are some 1,800 or more government agencies buying hospital care and no consistent pattern of payment. In general, tax-supported agencies buying care tend to pay the hospital less than "cost of service" which means an added cost to other patrons, including the Blue Cross.

This study is independent, not government sponsored or stimulated, and we may hope for a fair and unbiased report. We can only wait and see.

RED FEATHER AND TORCH

AMERICANS, wherever they are found, are public spirited, public minded, interested in the bettering of the circumstances of their neighbors, as well as of themselves. Relief agencies of every description, agencies for boys' work, girls' work, children's aid, family service, Red Cross, March of Dimes, Cancer Societies, Tuberculosis Societies, to mention just a few, have been active for many years throughout the land. Each of these had a campaign for funds.

These numerous "drives" became not only a matter of constant duty, but also of irritation. They took too much time and interfered too much with ordinary affairs. A little over thirty years ago a few far-sighted and public spirited citizens conceived the idea of consolidating all these drives in one grand effort, a Welfare Fund, or Community Fund, or Associated Charities. Whatever the name, the whole community joined, appointed a permanent board, selected a method of raising a large sum of money, and the modern Community Chest was born. This has been known as the Red Feather Agencies. The annual drive will be held in Michigan this fall. We had intended to list the Community Chests in Michigan but find there are one hundred twenty, conducting one hundred sixteen campaigns for operating funds.

Of late years, a large number of societies for the study of various diseases have developed. In Michigan there are the Michigan Heart Society, the Michigan Cancer Society, the Crippled Children, the Polio, the Sister Kenny, Arthritis and Rheumatism, Cerebral Palsy, Tuberculosis and many others. Most of these societies did not belong to the various Community Chests, so necessarily had to conduct their own individual fund-raising campaigns.

In 1947, many social and industrial leaders, stimulated by certain of our medical men, formed the United Health and Welfare Fund, with its consolidated campaign. This is the Torch Fund, which started in Michigan. The campaign will be consolidated with the Community Chests in most of the state areas.

We salute the Red Feather and the Torch. They are a distinct advance in our social evolution to—a better life.

ARE YOU REGISTERED— WILL YOU VOTE???

THE RIGHT of voting is precious. Literally hundreds of thousands of Americans have fought for that privilege. Research has shown that medical men in the past have been lax in taking advantage of the boon. Hopefully, that situation is in the forgotten past.

We hope and trust that every MSMS member and his family have registered and will vote. How you vote is important, but *that you vote* is more important. An election decided by a minority is not "Majority Rule."

It has been suggested that we, the medical profession, make election day, Tuesday, November 4, 1952, a MEDICAL HOLIDAY—that we make no appointments, have a free schedule, and that we spend a sufficient time getting our friends or patients to the voting places. That's a good way to preserve our present type of medical freedom.

Let us have a real election with no absentees on November 4.

Let us make it a medical holiday.

Let us vote—and help many others to vote!

MSMS

Today the Federal government comprises over 2,055 executive agencies, employs more than 46,000 propaganda agents, gives direct orders to the largest peace-time army in its history and also to 2½ million Federal employes who don't wear uniforms.

Beyond that, exactly 27,000,000 Americans look to local and Federal treasuries for checks.

Frederick Grant Banting, M. D.

By William M. LeFevre, M.D.
and John C. Farmer

Muskegon, Michigan

IT SEEMS only fair that we should accord to Frederick Grant Banting a place among the most honored in the world's long history; even more so because his was a positive contribution to his fellow man. He was a shy fellow, actually disdainful of the praises heaped upon him, and eager only to hasten ahead in this short life and continue his work. His tragic death in 1941 was a great loss to the medical world, yet he willed to future millions of people a life far more comfortable and happy than they otherwise could have enjoyed.

He was born on a farm near Alliston, Ontario, in 1891. Here he spent his early youth, attending the local schools and working on the farm. Surprisingly, he was not a particularly brilliant student at the time and often was worried whether he would pass into the next school year. He took great interest in athletics and was a valuable member of his school baseball and soccer teams. After graduation he was sent to Victoria College by his father who hoped to interest his son in the ministry. The boy, however, decided to enter the field of medicine. At the University of Toronto, Banting proved to be an average student in medicine. Here his greatest asset, which he carried with him through life, was the ability to work hard.

Graduating in 1917, he immediately entered the Medical Service and was soon in France. It was not long before he proved himself a hero. During the battle of Cambrai his Battalion Medical Officer was killed and Banting, a young and inexperienced Captain, replaced him. He remained in the front line aid station under constant fire operating and dressing the wounded. His right forearm was torn by shrapnel but he refused to leave. The next morning, seriously ill, he was evacuated to the rear where he steadfastly refused to have his arm amputated. His superiors finally allowed him to treat his own arm which completely healed. He was awarded the Military Cross of Honor by the British Army for bravery in action.

Doctor Banting's photograph appears on the front cover of this number of THE JOURNAL.

After the war, Banting spent a year as intern in the Children's Hospital in Toronto. Interested in orthopedic surgery he set up an office in London, Ontario, but it became such a struggle to meet his financial requirements that he was forced to accept a position as instructor in physiology at the University of Western Ontario. Concentrating on the physiology of the pancreas, he became convinced that it would be possible to isolate hormones from the pancreas of cattle which would be useful in treating diabetes mellitus in man. In May, 1921, he finally persuaded Dr. J. J. R. Macleod to lend him a laboratory to conduct his experiments at the University of Toronto.

The story of his discovery of insulin with the help of Charles Best is well known.

Of course, the world owes him a great debt; but he would have been the first to deny it. After discovering insulin he shyly accepted the honors bestowed upon him but continued his work. He won the Nobel Prize in 1923 and in 1933 was made a Knight of the British Empire. As chairman of the Banting and Best Department of Medical Research at the University of Toronto, he made significant contributions to the study of cancer, silicosis, coronary disease and electro-encephalography. When World War II began, he returned to uniform and as a Major was liaison officer between the Canadian and United States National Councils on Research. He died, February, 1941, in a plane crash in Newfoundland while en route to England to demonstrate a new aviation suit.

Perhaps, in his own words, there is an answer to many of our remaining medical problems: "I am a firm believer in the theory that you can do or be anything that you wish in this world, within reason, if you are prepared to make the sacrifices, think, and work hard enough and long enough."

References

1. Harris, Seale: An appreciation of Banting and Best. Proc. Am. Diabetes A., Sixth Annual Meeting, p. 119, 1946.
2. Hipwell, Fred W.: Memories. Proc. Am. Diabetes A., Third Annual Meeting, p. 113, 1943.
3. Best, C. H.: Frederick G. Banting. Science, 93:248 (March 14) 1941 (as seen in Proc. Am. Diabetes A., First Annual Meeting, p. 113, 1941).

Diabetic Enjoys Normal Life Twenty-Five Years

Carl Lundgren became diabetic when he was sixteen years old. That was in 1927. Carl has been on a well-regulated, accurately measured diet ever since. He has taken insulin each day as directed by his doctor. He finished high school and later studied to be a draftsman. He went to work in a manufacturing plant and has been promoted at regular intervals. He is married, has two children, and his hobby is boating. This summer he and his wife had a delightful trip to Mackinac Island in their cruiser.

At the present time he has a normal blood pressure, normal kidney function, no evidence of peripheral vascular disease, and normal-appearing occular fundi.

All this was possible *only* by carefully following his diabetic routine of diet and insulin. This routine does not interfere with his normal activities. He eats well and can follow his diet at home, at play, or on his boat. This happy life is possible for any diabetic person if he is properly instructed by his doctor of medicine and follows the instructions.

Diabetic Retinitis

Relationship Between Retinal Degenerative Changes and the Degree of Diabetic Control

Visual disturbances in the diabetic are preventable for an indefinite number of years, depending upon the degree of dietary control. Loss of vision is devastating and the physician who accepts the diabetic as a patient assumes the trust and the responsibility of giving that person the advantages of all the factual scientific, experimental, and clinical knowledge which has been amassed over the years.

One reason for poor results in the treatment of diabetes is the fact that the disorder is a painless one, and therefore patients feel well until complications intervene. Another reason is the fact that proper control requires vigilance twenty-four hours every day, and its own monotony is a cause of laxity.

In 1943, Ballantyne called attention to capillary telangiectases or aneurysms which he thought might be specific in diabetes. Further work by him, Friedenwald, Ashton, and others convinces us that the lesions are abundant in uncontrolled diabetes. Similar lesions are also found in reparative processes following obstruction of the central retinal veins.

Peculiarly the lesions are confined to the eye. The aneurysms are round and uniform in size in contradistinction to the elongated and irregular hemorrhage of hypertensive and renal disease, the lesions of which are found in the middle layers of the retina.

If the aneurysms are watched closely they may be found to disappear when the disease is brought under control.

The author has also seen other instances in which aneurysms disappear when good control is restored for a sufficient period of time in patients with severe uncontrolled diabetes of long duration. O'Brien and Allen showed that retinopathy disappeared after two months of good control in six diabetic individuals, all of whom were under thirty-one years of age. On close observation some of the lesions may disappear spontaneously, so evaluation of treatment requires some caution.

Diabetic retinitis and Kimmelstiel-Wilson disease are frequently considered as allied. In all probability time and further experience will show that both are the result of insulin inadequacy, or untreated diabetes, and that they are simply stages of the same process. We find diabetic retinitis in the absence of Kimmelstiel-Wilson disease, but not vice versa.

From the standpoint of microscopic pathology, diabetic retinitis and Kimmelstiel-Wilson disease have several things in common. Capillary dilation is present in both, and there is localized degeneration and proliferation of the vessel walls. There is hyaline deposition in the intercapillary connective tissue of the kidney on the one hand and waxy exudates in the retina on the other.

The best results have been obtained in those patients who have avoided glycosuria and hyperglycemia most consistently, and that is the goal. Reactions must be avoided. Hyperglycemia and glycosuria are non-physio-

(Continued on Page 1366)

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

DEMAND FOR BIRTH CERTIFICATES TAXES DEPARTMENT FACILITIES

The demand for birth certificates is creating in the Department a situation rapidly approaching that of the early days of World War II. An average of fifty persons a day are coming to the Department for copies of birth certificates, a volume of desk service greater than the Department is staffed to maintain continuously. As a result, the backlog of unprocessed mail requests has passed 1,000 and is increasing daily.

One of the reasons for the unusual demand is the crowded conditions of the schools. In some areas school officials are requiring a birth certificate for enrollment. Another reason is the resumption of hiring by heavy industry following the steel strike.

RENEWED EMPHASIS PLACED ON BOOSTER SHOTS FOR DIPHTHERIA PREVENTION

With diphtheria at its lowest point in the history of the state, the Department is undertaking the difficult task of stimulating interest of parents in continued protection by booster shots. Unless immunization levels are kept high, the state is in constant danger of an epidemic of this disease.

As diphtheria continues to go down, the need for booster shots to replace the stimulus no longer provided by the diphtheria carrier is becoming increasingly urgent. Parents need to be reminded that when children are not being constantly exposed to the diphtheria bacillus they lose their artifically induced immunity and must, therefore, be given additional protection.

The Department recommends boosters at three, five and ten years of age to maintain maximum protection. This is in contrast to the former recommendation of booster shots at three and five. The additional shots is the answer to the present lack of routine exposure to the diphtheria bacillus.

Once before, from 1940 to 1943, diphtheria showed a sharp downward trend, with an average of about 240 cases per year. In 1944 this trend was reversed and cases had shot up to 630 by 1945. A statewide immunization campaign was launched and the disease declined sharply, going below 100 cases a year in 1950, for the first time in Michigan history. In that year only eighty-four cases were reported. Only forty-eight were reported in 1951 and twenty-eight have been recorded so far this year.

IODIZED SALT EDUCATIONAL CAMPAIGN UNDER WAY

The story of goiter control in Michigan will be featured in the October issue of *Michigan's Health*, monthly bulletin of the Department, following publication of the report on "Goiter Prevention in Michigan" by Brock E. Brush, M.D., and J. K. Altland, M.D., in The Journal of the Michigan State Medical Society. The bulletin article will launch an intensive educational campaign urging use of iodized salt, to include news releases, radio broadcasts, exhibits, posters and pamphlets.

FILM LOAN LIBRARY READY FOR YEAR'S DEMANDS

There are now a total of 240 films, eighty-eight film strips, and seven sets of slides in the film library. Films intended for professional use are Breast Cancer: The Problem of Early Diagnosis; Gastrointestinal Cancer: The Problem of Early Diagnosis; Uterine Cancer: The Problem of Early Diagnosis; Routine Admission Chest X-Ray in General Hospitals; Techniques of Group Chest X-Ray Services; Penicillin and Venereal Disease and Syphilis.

Film strips for professional groups are: Hookworm Disease and Hookworm Infection; Laboratory Diagnosis of Rabies; Laboratory Diagnosis of Tuberculosis (Part I); Life Cycle of a Malaria Parasite; Medical Certification of Causes of Death; Worms in Your Muscles: Spread and Prevention of Trichinosis and Taking Care of Diabetes (Kit includes 11 sound film strips, wall charts, and a teaching guide manual).

HEALTH OFFICER CHANGES

M. R. French, M.D., became director of the Kalamazoo City-County Health Department on September 8, resigning as director of the Branch-Hillsdale District Health Department.

Donald M. Harris, M.D., was appointed Director of the Branch-Hillsdale Health Department, effective August 8. Dr. Harris was in Michigan from 1946-48, first as director of the Chippewa County Health Department and later as head of the Chippewa-Luce-Mackinac District Health Department.

R. L. Loftin, M.D., resigned as director of the Bay City and Bay County Health Departments effective September 1, 1952.

Benton V. D. Scott, M.D., resigned as director of the Jackson City Health Department effective September 5, 1952.

Roelof Lanting, M.D., was appointed director of the Shiawassee County Health Department September 1, having resigned as director of the Lansing-Ingham County Health Department as of the same date.

Ernest Cook, M.D., has resigned as director of the St. Joseph County Health Department effective August 31.

J. C. Slaybaugh, M.D., has resigned as acting director of the Mason County Health Department and Mr. William Hasenbank, Chairman of the Mason County Board of Health, was appointed acting director to serve until a full-time director is appointed.

Mr. Ivan Miller, Chairman of the Mecosta-Osceola Board of Health, has been appointed acting director of the Mecosta-Osceola District Health Department to serve until a full-time director is chosen.

THE COUNCIL-ACCEPTED USES OF

Dramamine®

NOW ARE:

SYMPTOMATIC CONTROL OF NAUSEA AND VOMITING ASSOCIATED WITH	*pregnancy* *therapy with certain drugs (antibiotics, etc.)* *electroshock therapy* *narcotization*
MANAGEMENT OF VERTIGO IN	*Ménière's syndrome* *radiation sickness* *hypertension* *fenestration procedures* *labyrinthitis*
MANAGEMENT OF VESTIBULAR DYSFUNCTION ASSOCIATED WITH	*Streptomycin therapy*

Tablets: 50 mg. each
Liquid: 12.5 mg. in each 4 cc.

—and, of course, MOTION SICKNESS

Dramamine®

BRAND OF DIMENHYDRINATE

•

SEARLE

RESEARCH IN THE SERVICE OF MEDICINE

•

In Memoriam

ANDREW L. HOENIG, M.D., of Cherokee, Iowa, died August 21, 1952, at the age of sixty-one. Dr. Hoenig became a member of the staff at the Iowa State Hospital ten months ago. Previous to that he had practiced medicine in Detroit for twenty years and earlier had practiced for five years in Mancelona, Michigan.

He is survived by his wife, Eve.

LEO G. JENTGEN, M.D., of Detroit, died August 10, 1952, at the age of sixty.

Dr. Jentgen was a surgeon and senior staff physician at Providence Hospital, Detroit. He joined the staff of Providence Hospital following his graduation from the University of Michigan Medical School in 1919.

He was a member of the American College of Surgeons.

Dr. Jentgen is survived by his wife, Madge; a daughter, Mary Margaret; one sister, Loretta, and two brothers, Frank Jentgen and C. J. Jentgen, M.D., of Detroit.

CHARLES H. O'NEIL, M.D., of Port Sanilac, died August 7, 1952, at the age of eighty-six.

Following his graduation from the Detroit College of Medicine in 1895, he began his practice at Deer River on Lake Superior, a lumbering center. Later he moved across the state to Black River on Lake Huron, another lumbering community. Following that he moved to Frederick, north of Grayling, where he spent ten years. In 1910, he came to Flint and continued the practice of medicine until his retirement in 1941.

Dr. O'Neil was a member of the Flint Board of Health from 1919 to 1928 and served as a member of the Hurley Hospital Advisory Board as well as becoming Chief of Staff. In 1922 he served as acting city health officer and was a member of the State Board of Registration in Medicine in 1925.

He is survived by his wife, Maude; two brothers, Edward, of Port Huron, and Dennis, of Detroit, and a sister, Mrs. David Sweet, of Port Huron.

WALTON K. REXFORD, M.D., of Detroit, died August 6, 1952, at the age of sixty-nine.

He had practiced medicine in Detroit since 1915. Dr. Rexford was graduated from the University of Michigan Medical School in 1908.

He was a member of the staff of Children's Hospital of Michigan and a consulting surgeon for Harper and Receiving Hospitals. Dr. Rexford was also an associate professor of urology at the Wayne University College of Medicine.

During World War I, Dr. Rexford served with the Medical Corps in France.

He was a Fellow of the American College of Surgeons and a diplomate of the American Board of Urological Surgery.

Dr. Rexford is survived by his wife, Hannah, a son, John, of Bay Village, Ohio, a daughter, Mrs. Charles Hawley of Pleasant Ridge, and four grandchildren.

LAWRENCE C. TOWNE, M.D., of Lansing, died August 16, 1952, at the age of sixty-eight.

For the past forty-three years he has served the community of Lansing, devoting his practice to internal medicine. He was graduated from the Northwestern Medical School in 1909.

He was a diplomate of the American Board of Internal Medicine and a Fellow of the American College of Physicians.

Dr. Towne is survived by his wife, Bess; two sons, William. B. Towne, of Niles, and James B. Towne, of Wilmette, Ill.; and one daughter, Miss Mary R. Towne, of Chicago.

FRANK N. WILSON, M.D., professor of internal medicine at the University of Michigan, Ann Arbor, died September 11, 1952, at the age of sixty-one.

Dr. Wilson was known throughout the medical world for his development of the electrocardiograph.

He was graduated from the University of Michigan Medical School in 1913 and became an instructor there in 1914.

During World War I he served in the U. S. Army Medical Corps as a captain.

In 1922 he returned to the University of Michigan as a teacher and became a full professor in 1924.

During his career he received many honors from medical organizations throughout the world.

A special number of *Circulation,* the Journal of the American Heart Association, issued in July, 1950, was dedicated to him, and similar recognition was given him by the *American Heart Journal* in the November, 1950, issue. At the annual meeting of the American Heart Association in June, 1951, the highest honor which can be conferred by the organization, the Gold Heart Award, was given Dr. Wilson in recognition of his scientific achievements.

Dr. Wilson was a diplomate of the American Board of Internal Medicine, and a member of the American and Michigan Heart Association, the Central Society for Clinical Research, the Association of American Physicians, the American College of Surgeons, the American Society for Clinical Investigation, and the American Society for Experimental Pathology.

He is survived by his wife, Julia, and a daughter, Mrs. Eugene Lepeschkis, of Vermont.

Borden's

"Homogenized Vitamin D Milk is a Wonderful Addition to any Diet!"

Has 400 U.S.P. units of Vitamin D added to EACH QUART.

Homogenization insures equal caloric value with each serving . . . plus a more uniform and better tasting product. Many persons who "don't like" ordinary milk, enjoy Homogenized Vitamin D.

FOR THESE REASONS, MAY WE SUGGEST CONSIDERATION OF THIS IMPROVED MILK FOR THE DIETS OF GROWING CHILDREN . . . FOR INVALIDS AND UNDERNOURISHED PERSONS . . . FOR ANYONE WHOSE DIETARY NEEDS INDICATE THE INGESTION OF MORE MILK NUTRIENTS.

THE BORDEN COMPANY
Michigan Milk Division
Detroit, Michigan

Your New Electrocardiograph-- WILL IT HAVE THESE FEATURES?

CONTINUOUS TIME MARKER

independent of the chart; assures accuracy of the time factor.

AUTOMATIC LEAD MARKER

obviates guesswork; you *know* which lead is recorded.

PRECISION RECORDING

sensitive to rapid changes in potential; no rounding of sharp peaks.

SIMPLE OPERATION

selection of lead at the turn of a switch; rapid calibration; controls all on one panel; portability; a clear, permanent record.

All these features are available in the

Burdick

EK-2 DIRECT-RECORDING ELECTROCARDIOGRAPH

THE BURDICK CORPORATION
Milton, Wisconsin

Send me information on the Burdick Direct-Recording Electrocardiograph.

☐ I would like a demonstration.

Dr._____

Address_____

City_____ Zone____ State____

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit 1, Mich.

Correspondence

Mr. Hugh W. Brenneman
Michigan State Medical Society
606 Townsend Street
Lansing 15, Michigan
Dear Mr. Brenneman:

Thank you for sending the copies of your excellent Medical Associates Brochure. This will be of tremendous help to us in formulating a similar plan for the North Carolina area and we believe the whole program pointed out in this brochure is very worthwhile.

Sincerely yours,

KENNETH E. PENROD, Ph.D.
Assistant Dean, Duke University, Durham, North Carolina

September 8, 1952

Dear Dr. Burns:

I am herewith enclosing a summary of the pertinent recommendations of the North Central States Conference on Brucellosis in Animals and Man, as relates to human brucellosis. Perhaps it would be desirable to convey this message to the members of the Society by publishing it in THE JOURNAL.

Please be assured of my appreciation in being asked to serve as representative of the Society at this conference.

Sincerely yours,

S. E. GOULD, M.D.
Wayne County Board of Institutions

Approved by:
R. M. ATHAY, M.D.
Superintendent
July 14, 1952

NORTH CENTRAL STATES CONFERENCE ON BRUCELLOSIS IN ANIMALS AND MAN

Herewith is submitted a report of the North Central States Conference on Brucellosis in Animals and Man. The Conference which was held in St. Paul, Minnesota, at the Lowry Hotel, July 7, 8 and 9, 1952, was attended by approximately 150 representatives of interested organizations from 14 states. Those attending included representatives from U. S. Public Health, U. S. Bureau of Animal Industry, state departments of health, state veterinarians, veterinary and agricultural colleges, farm organizations, cattle and hog raisers, farm publications, live stock dealers, dairy producers and representatives from the state medical societies of Wisconsin, South Dakota and Michigan. Only three representatives attended from Michigan: The Michigan State director of the Bureau of Animal Industry, the Chief Veterinarian of the State Department of Health and the representative of the Michigan State Medical Society.

The program of the first day consisted of presentation of formal papers and a summary of each state's activities on the control of brucellosis. On the second day each representative was assigned to one of 10 task forces. Each task force was given a specific subject for discussion and formulation of recommendations. The reports were read at the conclusion of the day. On the third day the recommendations of each task force were discussed by the general assembly and final recommendations adopted.

Specific points of special interest to medical men may be listed here.

The principal sources of human infection in order of importance in the U. S. are: first, cattle; second, hogs; and third, goats. Inasmuch as the disease in man is spread almost always from infected animals and their products, the eradication of human brucellosis depends on eradication of brucellosis in animals. As a result of the control measures now in force, there is definite evidence of decrease of the disease among animals in the U. S. and there is evidence that the disease can and will be eradicated both in animals and man. The chief methods of control and eradication among cattle at present are: (1) herd testing by means of abortus ring test of pooled specimens (from 1 to 3 cans) of milk; (2) blood agglutination of all cattle in herds having positive ring tests; isolation and eventual disposal, preferably by slaughtering, of reacting animals (those with positive agglutination test of 1:100 and over); vaccination, with standard vaccine, of calves between ages 4 and 8 months.

Approximately 75 per cent of all human infections are the result of occupational exposure and hence the disease acquires great importance as an occupational hazard, particularly among farm workers, live stock workers, veterinarians and dairymen. Approximately 25 per cent of human infection is the result of ingestion of non-pasteurized infected milk and milk products.

The disease in man cannot be diagnosed with certainty without the aid of the laboratory. For this reason it is exceedingly important to define clearly the tests that are of value and to indicate those that are not.

The only absolute confirmation of the diagnosis is a positive culture *(Br. abortus, Br. suis* or *Br. melitensis)*. A culture may be positive in the absence of fever and even during or after antibiotic therapy. (Aureomycin is the drug of choice; penicillin has no value whatever in this disease.) If the blood culture is negative, cultures may be made of the sternal bone marrow, other infected tissue or secretion, a lymph node that has recently enlarged, the urine, cerebrospinal fluid or synovial fluid.

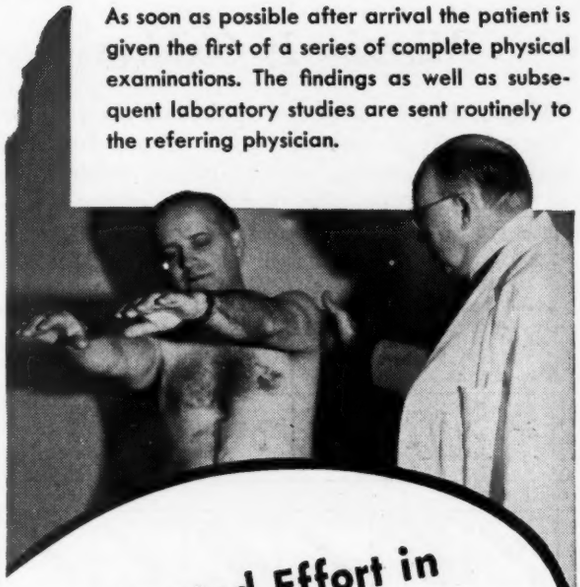
The skin test has about the same importance as the tuberculin test, a positive test indicating skin immunization, usually as a result of past exposure. It does not indicate that the patient has the specific infection at the time of the test. Consequently *the skin test should not be relied upon* for diagnosis. Likewise the opsonic test is unreliable and it is recommended that it *not be used*. The complement-fixation test is difficult to perform and is *not* recommended as a routine procedure.

The agglutination test is of great value, a titer of 1:160 or over having diagnostic value, and especially a rising titer during the period of observation of the patient. The two most important points in performance of the agglutination test are the reliability of the antigen and the proper technique in conducting the test. The Conference recommended that the antigen prepared by the Bureau of Animal Industry be recognized as the standard antigen and that this antigen be made available to all laboratories. The Conference also recommended that the test be carried out according to criteria adopted by the National Research Council (see Diagnostic Criteria for Human Brucellosis, W. W. Spink et al., J.A.M.A., 149: 805-808, June 28, 1952).

Dear Doctor:

Your letter of enquiry to Dr. Wilfrid Haughey, Editor of the *State Journal* has been referred to us for reply.

The latest information we have concerning the reclassification of Priority III physicians by the Selective Service System, is that Priority I and II will be exhausted before calling Priority III. When they start calling Priority III they will be called by age bracket starting with the youngest in that group.



As soon as possible after arrival the patient is given the first of a series of complete physical examinations. The findings as well as subsequent laboratory studies are sent routinely to the referring physician.

Coordinated Effort in
TREATING the
ALCOHOLIC
PATIENT

The system of therapy at The Keeley Institute is aimed (1) at overcoming the *acute attack* of alcoholism; restoring the patient's well-being, and (2) through group and individual re-education attaining a condition of *permanent sobriety*.

At all times the regimen of treatment is well coordinated under the direction of a staff of experienced full-time physicians who are members of the American Medical Association.

When you refer a patient to The Keeley Institute, you know that he will be taken care of as your patient and you are continually informed of his progress.

Member, American Hospital Association
Member, Illinois Hospital Association
The Keeley Institute is accredited by the Council on Medical Education and Hospitals of the A.M.A.

Complete information, including rates, will be furnished to physicians on request.

THE KEELEY INSTITUTE
DWIGHT, ILLINOIS

Migraine In Children

"Migraine may appear during the first years of life. The presence of subjective signs, such as headache and flimmer scotoma, is often difficult to determine in young children. The true nature of the symptoms frequently remains obscure for years."

Vahlquist, B. and Hackzell, G.: Acta Paediatrica *38*: 622 (1949).

NO. OF CASES	SEX	AGE AT ONSET	CYCLIC VOMITING	DURATION OF ATTACK	INTENSITY
31	8 ♀ 23 ♂	3 yrs. (mean)	3 out of 31	2½ hrs.	severe in all cases

TABLE CONT'D

NO. OF CASES	UNILATERAL HEADACHE	NAUSEA	FLIMMER SCOTOMA	VERTIGO	HEREDITY
31	18 out of 31	31 out of 31	12 out of 31	6 out of 31	20 out of 31

(reference given above)

In a study of 400 adult migraine patients, it was revealed that 34% had suffered attacks before the age of 15.* These investigators concluded that childhood migraine was a much greater clinical problem than was previously believed and that psychodynamic mechanisms played an important part in the disease.

These criteria are useful in diagnosis:

Headache attacks with symptom-free intervals plus (at least two of the following) nausea, scintillating scotoma, hemicrania, and hereditary predisposition.

For symptomatic relief in these cases, Cafergot®, N.N.R. (ergotamine with caffeine) may be administered orally. For best results, give adequate dosage promptly.

For children within the age range 7 to 12 years—Cafergot® is administered, one tablet when the attack appears imminent followed by one additional tablet within 30 minutes. Not more than two Cafergot tablets should be administered to children within this age range.

In the adolescent age group, 12 to 18 years of age, the dosage may gradually be increased as necessary up to the usual adult dose, i.e., two tablets when the attack appears imminent followed by one tablet doses at half hour intervals until the attack is aborted. *(Total maximum dose for adults: six tablets for each attack.)*

*Katz, J., Friedman, A.P., and Gisolfi, A.: New York State J. Med. *50*: 2269 (Oct.) 1950.

Sandoz Pharmaceuticals

DIVISION OF SANDOZ CHEMICAL WORKS, INC.
68 CHARLTON STREET, NEW YORK 14, N. Y.

Being classified 1-A and ordered for a pre-induction physical does not necessarily mean that orders to report for induction will follow immediately. It is very possible that the physical examination will disqualify a number in the older age bracket.

If this does not fully cover your questions, do not hesitate to call on us again.

Sincerely yours,
GROVER C. PENBERTHY, M.D.
Chairman, Michigan Volunteer Advisory Committee

Aug. 22, 1952

Dear Doctor Haughey:

This is to acknowledge your very good letter of August 25, 1952.

It is indeed gratifying to learn that the October issue of your JOURNAL will be devoted to the subject of diabetes, and we are most appreciative of your fine cooperation.

The material which you have outlined, including an editorial on diabetes by my good friend Doctor LeFevre will, I am sure, cover the subject adequately.

On behalf of the American Diabetes Association, I would like to take this opportunity to express our sincere appreciation for your interest and splendid assistance.

Very cordially yours,
JOHN A. REED, M.D., *Chairman*
Committee on Detection and Education
American Diabetes Association

Sept. 4, 1952

LUXURY PLACED BEFORE HEALTH

A spokesman for the U. S. Chamber of Commerce said today a "psychological law" keeps the average American from putting as much money into medical care as in an automobile or television set.

Emerson P. Schmidt, the organization's economic director, said the "low priority" the public gives to medical expenditures is responsible for some of the shortcomings of present medical services.

In testimony prepared for President Truman's commission on the nation's health needs, Schmidt made a spirited defense of voluntary health insurance programs and condemned proposals for compulsory insurance.

He said that if the public in the last 25 years had been as eager for "deluxe medicine" as for other items, the nation "would at present have an abundance of medical practitioners and facilities, just as in the case of automobiles."

"The normal person," he said, "buys a $2,500 automobile on the installment plan because he wants it. But a $2,500 operation he may regard as a violation of social justice."

Schmidt was one of a series of witnesses to appear before the commission at public hearings on the hotly disputed question of how the nation can best pay for adequate health care.—*Lansing State Journal,* October 9, 1952.

STEELTONE

by Hamilton

Hamilton Steeltone examining room equipment embodies many exclusive features that make your office more productive. Counterbalanced top—Fit-All disappearing stirrups and built-in Hide-A-Roll, Ster-O-Sheet table cover attachment are all patented and available only in Hamilton equipment.

Steeltone—conservative in appearance, professional in design, and constructed of heavy, electrically welded furniture steel is a wise choice in modern examining tables and treatment and instrument cabinets. Finish is chip-proof, acid-resistant Du Pont Dulux. Available in white or five colors that harmonize with modern room decorating schemes. Come in and see our display of Steeltone and the complete line of Hamilton examining tables and cabinets soon, won't you?

Hamilton Steeltone Suite. All steel—electrically welded. Five colors and white.

NOBLE-BLACKMER, INC.

267 W. Michigan Ave., Jackson, Michigan

ACCIDENT • HOSPITAL • SICKNESS
INSURANCE

For Physicians, Surgeons, Dentists Exclusively

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000 accidental death Quarterly $8.00 **$25 weekly indemnity, accident and sickness**	**$15,000 accidental death Quarterly $24.00** **$75 weekly indemnity, accident and sickness**
$10,000 accidental death Quarterly $16.00 **$50 weekly indemnity, accident and sickness**	**$20,000 accidental death Quarterly $32.00** **$100 weekly indemnity, accident and sickness**

COST HAS NEVER EXCEEDED AMOUNTS SHOWN

ALSO HOSPITAL INSURANCE

	Single	Double	Triple	Quadruple
60 days in Hospital	5.00 per day	10.00 per day	15.00 per day	20.00 per day
30 days of Nurse at Home	5.00 per day	10.00 per day	15.00 per day	20.00 per day
Laboratory Fees in Hospital	5.00	10.00	15.00	20.00
Operating Room in Hospital	10.00	20.00	30.00	40.00
Anesthetic in Hospital	10.00	20.00	30.00	40.00
X-Ray in Hospital	10.00	20.00	30.00	40.00
Medicines in Hospital	10.00	20.00	30.00	40.00
Ambulance to or from Hospital	10.00	20.00	30.00	40.00
COSTS (Quarterly)				
Adult	2.50	5.00	7.50	10.00
Child to age 19	1.50	3.00	4.50	6.00
Child over age 19	2.50	5.00	7.50	10.00

$4,000,000.00 INVESTED ASSETS

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION

$18,900,000.00 PAID FOR CLAIMS

50 years under the same management

400 First National Bank Building
Omaha 2, Nebraska

$200,000.00 deposited with State of Nebraska for protection of our members

. . . . . NEWS MEDICAL

MICHIGAN AUTHORS

D. Emerick Szilagyi, M.D.; R. Ralph Margulis, M.D., and **Gilbert D. Jay, III, M.D.,** of Detroit, are the authors of an article, "Observations on Effects of Corticotropin (ACTH) and Cortisone in Management of Some Postoperative Surgical Problems," published in the *Archives Of Surgery,* August, 1952.

Franklin H. Top, M.D., of Minneapolis, Minnesota, formerly of Detroit, is the author of an article, "Ammunition Against Infections," published in *The American Academy of General Practice,* September, 1952.

Reed M. Nesbit, M.D., of Ann Arbor, read a paper, "Problems Relating to the Recognition of Hydronephrosis in Everyday Medical Practice," October 1, 1952, at the annual meeting of the Medical Society of the State of Pennsylvania.

V. Everett Kinsey, M.D., and **Charles E. Frohm, M.D.,** of Detroit, are the authors of an article, "The Aqueous Plasma Steady-State-Ratio of XYLOSE," published in the *American Journal of Ophthalmology,* August, 1952.

* * *

Official estimate of tuberculosis cases reduced.—Public Health Service and National Tuberculosis Association have revised downward by 20 per cent their estimate of the total number of active tuberculosis cases in the country. The new figure of 400,000 replaces the half-million estimate used during the past ten years. Of the total, it is estimated that 150,000 cases are undiscovered. PHS notes that the older estimate was based on mortality data, while the present estimate was arrived at through an inventory of tuberculosis cases registered with local health departments and on findings of chest x-ray programs.

* * *

Survey Research Projects.—The Committee on Research of the AMA Council on Pharmacy and Chemistry will soon mail questionnaires to determine what medical research projects are in progress in the U. S. at the present time. The survey has a three-fold purpose: to establish an up-to-date file of medical research projects; to evaluate the premise that certain fields of medical research are suffering from lack of financial support, and to consider the actual contributions of individual scientists in terms of free time and personal expenditure of funds. A random sample of 15,000 physicians from all parts of the country and selected personnel from medical schools, public health services, and pharmaceutical firms will be asked to participate in the survey.

New Office Opens September 1.—The new office of the Joint Commission on Accreditation of Hospitals, at 660 Rush Street, Chicago, opened on September 1. Dr. Edwin L. Crosby, former superintendent of Johns Hopkins Hospital, Baltimore, is director of the Commission, which will assume responsibility for the hospital standardization program formerly carried out by the American College of Surgeons.

* * *

Free Advice for Doctors.—Timothy Turner, columnist for the *Los Angeles Times,* wrote an article recently about the reading material usually found in doctors' offices. He studied the subject in detail and then came up with some ideas.

He said magazines for doctors' offices should be the ones that have short stories or articles. Continuing, he said:

"This leaves out such publications as the *Saturday Evening Post* and *Collier's,* for they have full-length articles and long short stories. One may have to wait for the doctor an hour or more, but hope springs eternal that he will not have to wait long, so he does not want to start a long story, for he may not be able to finish it.

"Here is my list: *Newsweek, Reader's Digest, Life, Holiday, National Geographic, Harper's Bazaar, Vogue, Seventeen, Business Week, New Yorker, Esquire,* and *Today's Health* (formerly *Hygeia*), an American Medical Association magazine."

* * *

Doctors and Drug Companies.—In his Sunday evening, September 14, TV broadcast, Drew Pearson predicted that the Federal Government will dissolve five New York drug companies, because 700 doctors own stock in the companies, and there is a suspicion that they might prescribe drugs for their personal profit rather than the benefit of the patients. This was given in a tone far from friendly.

* * *

Louis H. Bauer, M.D., President of the American Medical Association, addressing the national convention of the American Legion in New York, said it was heartening in this critical year of 1952 "to see that both of our major political parties—one of them directly and the other by implication—have recognized that great upsurge of public opinion on the issue of socialized medicine."

"The health plank in the Republican party platform," he continued, "includes the outright statement that 'We are opposed to Federal Compulsory Health Insurance with its crushing cost, wasteful inefficiency, bureaucratic dead weight, and debased standards of medical care.'

"The Democratic party platform—adopted by a convention representing the views of the party rank-and-file, in contrast to the views of a handful of planners in the executive department of the federal government—contains no endorsement of Compulsory Health Insurance, as has been the case with previous platforms, but simply urges a resolute attack against the financial problems involved in serious illness.

"In view of what has been happening during the past three or four years, both party actions confirm the validity of the medical profession's case against socialized medicine. The two party platforms also give reason for hope that never again will the people's health be used as a football in the political arena. Above all, however, they constitute a timely tribute to the forces of an aroused public opinion."

Dr. Bauer covered a wide range of subjects in his Legion talk, including constitutional rights, bureaucracy in government, corruption, confiscatory taxes, socialism, propaganda and the Federal Security Agency, states' rights, the tremendous growth of voluntary health insurance plans, and the International Labor Organization.

"The American Medical Association and the American Legion have much in common," he said. "Not only are they jointly interested in the health and welfare of the veteran, but they also have provided the main leadership in the drive against the socialism which is steadily creeping over this country."

Dr. Bauer said that American physicians will be forever grateful to the Legion for its early, vigorous and continued support against socialized medicine.

* * *

Michigan Medical Service, as of July 31, 1952, had 2,548,742 persons covered by its voluntary surgical or medical-surgical plans. At the same time, Michigan Hospital Service had 2,688,248. Of these, Federal, State and local government employes amounted to 84,870; school units amounted to 58,218.

Since its inception until July 31, 1952, Michigan Medical Service has paid out to doctors for medical services $87,328,000 at an average overhead of 10.86 per cent.

Michigan Medical Service owns an office building in Detroit which it will occupy in 1953, the Burnham-Strople Building.

There is a reserve for contingencies of $5,126,039.42.

* * *

Max Karl Newman, M.D., served as chairman of the national meeting of the American Federation of the Physically Handicapped, at the Statler Hotel, Detroit, Michigan, August 10-12, 1952. He moderated a medical panel on medical rehabilitation, of which Dr. Michael Hranchook, M.D., medical director of the Detroit Transmission Company, was a participant.

* * *

Health Plans Gain Widely in Nation.—85,991,000 persons in the United States had hospital insurance in 1951, a rise of 12 per cent. More persons in this country were protected through voluntary plans against sickness and accident in 1951 than ever before, according to the results of a survey released by the Health Insurance Council of the Institute of Life Insurance in its annual report on accident and health coverage in the United States.

It's Topcoat Time at Kilgore and Hurd

Our new Fall Showing of Topcoats is the most comprehensive and colorful we've ever presented. It embraces the newest styles and models selected to present you at your tailored best on all occasions. We suggest you inspect this showing early for choicest selection.

KILGORE and HURD

1259 WASHINGTON BLVD IN THE BOOK TOWER

DETROIT

ANNOUNCING A NEW

MERCURIAL DIURETIC

CUMERTILIN® SODIUM

(Mercumatilin Sodium—Endo)

For controlled treatment of salt retention edema

- Basically different in chemical structure
- A promptly effective, potent diuretic
- High degree of freedom from untoward systemic effects
- Well tolerated intramuscularly
- Works well without adjuvant ammonium chloride

Supplied: 1cc and 2cc ampuls in boxes of 12, 25 and 100.

THE G. A. INGRAM COMPANY

4444 Woodward Avenue, Detroit 1, Mich.

After allowing for duplication of coverage, there were 85,991,000 persons with protection against hospital expense when 1951 ended, an increase of 12 per cent over the 76,961,000 persons covered a year earlier. Compared with ten years earlier, coverage had increased by nearly 70,000,000 persons. This type of protection, the council explained, provides benefits toward payment of hospital charges for room, board, et cetera.

* * *

Postgraduate Courses in Vienna.—One of the brightest spots in the University of Vienna's fame as a medical center has always been its postgraduate courses and, if the current plans of a group of Viennese physicians are brought to fruition, these courses will begin once again to play an important role in the training of American doctors.

During the years preceding World War II, thousands of American doctors attended the courses given by the University's famous Academy of Medicine. Most of these American medical men came to Vienna under programs arranged by the American Medical Association of Vienna.

The Association became defunct in 1938, but a number of Viennese and American professors formerly associated with it have—for some time—felt that a similar organization would be a valuable means of facilitating study in Vienna by American doctors.

Many of Vienna's greatest specialists are still teaching in the Academy and contrary to popular belief, many of the clinical facilities in Vienna are actually on a higher level than they were in prewar times.

A complete course registry listing over 515 English language courses has been prepared, together with other materials. Registrations for courses can be made at any time throughout the year. Applications should be sent directly to the Vienna Academy of Medicine, Allgemeines Krankenhaus, Wien IX, Alserstrasse 4, Austria.

* * *

The American Society of Physical Medicine and Rehabilitation at its annual session in New York, August 28, 1952, elected Max Karl Newman, M.D., of Detroit, secretary-treasurer.

* * *

The 8,055 Mobile Army Surgical Hospital (MASH), the first of its kind in Korea, has just treated and evacuated its 50,000th battle casualty.

The 200-bed MASH, organized two weeks after the outbreak of the Korean war, has been at its present location, just behind the front lines since last October.

Helicopters and ambulances have brought in wounded troops from American, Korean, British, Canadian, Australian, New Zealand, Filipino, Turkish, Colombian, Ethiopian, Thai, French, Netherland, Belgian, Luxembourg and Greek units. Hospital personnel take pride in the amazing patient recovery rate of 99.8 per cent.

Maj. Jeremiah Holleman, MC, Columbus, Miss., heads the staff of 15 American and Canadian doctors, one American dentist, 16 nurses and 181 other officers and enlisted men assigned to administrative and technical duties. The nursing staff, under Capt. Lorena M. Goodell, ANC, Syracuse, N. Y., includes nurses from the Netherlands, France, Greece, and the United States.

THE HAVEN SANITARIUM, INC.

1850 PONTIAC ROAD — **ROCHESTER, MICHIGAN**

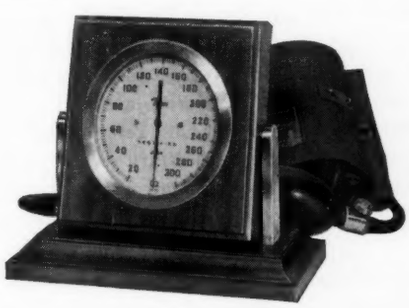
Telephone OLive 1-9441

LEO H. BARTEMEIER, M.D.
Chairman of the Board
HILBERT H. DE LAWTER, M.D.
Clinical Director
MR. GRAHAM SHINNICK
Manager

A private hospital 25 miles north of Detroit for the diagnosis and treatment of mental and emotional illness—psychoanalytically trained resident physicians.

LOOK at the new *Tycos** Desk Aneroid...

. . . and you'll see an instrument professionally designed and styled for modern doctors' offices and examination rooms. Housed in hand-rubbed, 3" x 7½" solid-walnut case with satin finish brass trim.



Dependable, accurate mechanism is the same as in the time-proven pocket-model Tycos Aneroid.

Easy-to-read—bold numerals and graduations on a 3⅜" ivory dial read up to 300 mm. Easel adjustment permits convenient reading angle.

Magnified sensitivity—because the long pointer magnifies slight variations in the pulse wave.

Visual check on accuracy—as long as the pointer returns within the oval zero, the instrument is accurate, backed up by a 10-year warranty.

Exclusive Hook-Cuff fits any size adult arm, goes on and off quickly, easily—an appreciated timesaver.

*Reg. U.S. Pat. Off.

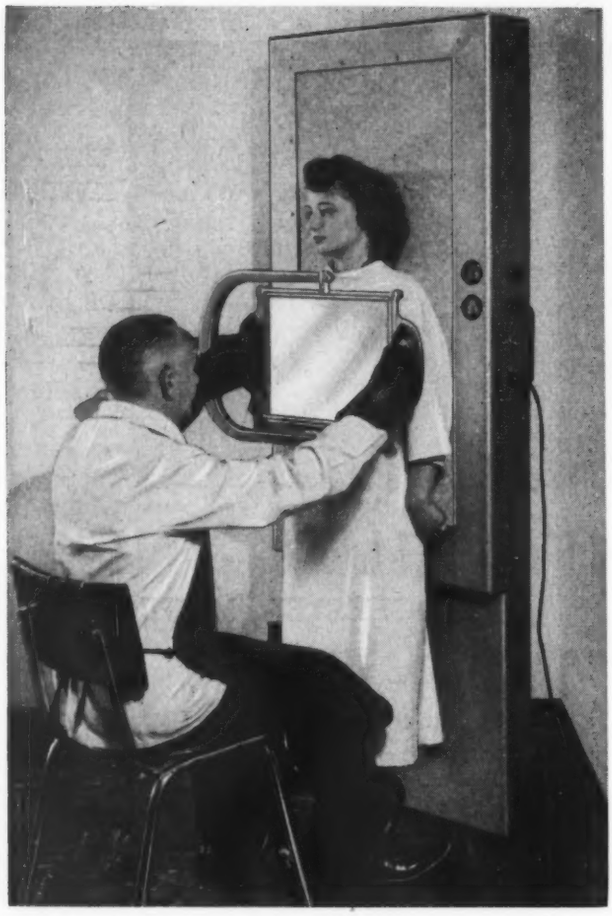
No. 5096

$49.50

complete with Hook-Cuff

MEDICAL ARTS SURGICAL SUPPLY CO.

24 Sheldon Ave. S.E. — **Telephone 9-8274** — **Grand Rapids, Mich.**



ANNOUNCING THE NEW "Spacesaver" Vertical Fluoroscope

LOW IN PRICE • EASY PAYMENT PLAN
INCOME AS YOU PAY

Maximum Output 15 Milliamperes—85 Peak Kilovolts
Fluoroscopic Rating 5 Ma at 85 PKV
Minimum space required—Ideal for corner installation
Operates from regular 110-volt office lighting circuit
Two Meters, 1 for Ma, 1 for PKV, mounted on front
Two controls mounted on side of panel frame
Built-in automatic ruby light eliminates installation of a ruby light in ceiling. Provides just enough room illumination before fluoroscopy to position patient. Ruby light goes out automatically when foot switch is depressed for fluoroscopy, leaving room dark.
Full size 12" x 16" Screen centers with Tubehead
Tubehead and Screen counterbalanced for easy handling
Attractive hammered gray finish with mother-of-pearl panel

M. C. HUNT
868 Maccabees Bldg., Detroit 2, Mich.
Distributor for
H. G. FISCHER & CO.

Priority III Physicians Classified.—Local draft boards on July 31 had processed 2,038 of the 32,636 physicians in Priority III. However, no call-ups from Priority III are anticipated until March at least. The plan is to call the younger men first. Priority III physicians are those who have had no military service, but were neither educated by the government nor deferred from World War II service to continue their education.

* * *

The Wayne County Academy of General Practice and the Michigan Academy of General Practice will sponsor a two-day Postgraduate Clinic at the Kellogg Center, East Lansing, November 17-18, 1952. This will be the sixth annual clinic co-sponsored by the two GP academies.

The host of subjects—from pediatrics to geriatrics—will feature the following guest lecturers: C. E. Dutchess, M.D., New York, on Geriatric subject; R. B. Greenblatt, M.D., Augusta, Ga., on "Functional Uterine Bleeding"; Gene H. Stollerman, M.D., New York, on "Rheumatic Fever"; D. L. Show, Jr., M.D., Philadelphia, on "Infant Nutrition"; G. S. Bates, M.D., Detroit, on "Blood and Blood Substitutes"; D. A. Cameron, M.D., Detroit, on "Trauma"; R. T. Costello, M.D., Detroit, on "Management of Degenerative Neurological Diseases"; G. S. Fisher, M.D., L. E. Bauer, M.D., and J. H. Curhan, M.D., all of Detroit, on panel covering "Abnormal States During Pregnancy"; A. S. Friedlaender, M.D., Detroit, on "The Antihistamines in Allergy"; S. W. Hoobler, M.D., Ann Arbor, Moderator of a Heart Panel by Grand Rapids, Ann Arbor and Detroit cardiologists; S. D. Jacobson, M.D., Detroit, on "Treatment of Obesity"; H. J. Kullman, M.D., Dearborn, on "Peptic Ulcer"; K. J. McMorrow, M.D., Detroit, on "What Does Modern Rehabilitation Offer?"; D. B. Marcus, M.D., Detroit, on "The Office Management of Diabetes"; D. W. Myers, M.D., on "Common Non-Tuberculous Pulmonary Diseases"; A. E. Schiller, M.D., Detroit, on "The Pruritides"; E. D. Spalding, M.D., Detroit, on "Differential Diagnosis of Coma"; P. V. Woolley, Jr., M.D., Detroit, on "Physiologic Treatment of Infant Diarrhea."

The annual meeting of the **Michigan Academy of General Practice** will be held on Monday, November 17, after luncheon. Plans to form a Congress of Delegates will be presented at this meeting.

The annual banquet will be held Monday, November 17, with Mr. Russell Barnes of the *Detroit News* as guest speaker.

Special entertainment for the ladies is being arranged.

The slogan of the 1952 Postgraduate Clinic is "Every GP a PG."

* * *

The Upjohn Company announces that Robert W. Heinle, M.D., has joined its Medical Division as of September 1, 1952. Dr. Heinle, a recognized authority on hematology, will be in the Department of Clinical Investigation, being concerned chiefly with studies in nutrition.

Say you saw it in the Journal of the Michigan State Medical Society

Tutag

PRESENTING A COMPLETE, MODERN LINE!

- Tablets
- Liquids
- Ointments
- Capsules
- Powders
- Injectables

ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

AMINOPHYLLINE NOW COUNCIL ACCEPTED

Another TUTAG Advance! Our Pure, White, Stable AMINOPHYLLINE TABLETS, 1½ Grains, Now Bear The Seal Of Council Acceptance.

• *Send For New Descriptive Lists Today!*

TUTAG

S. J. TUTAG & COMPANY

— Pharmaceuticals —

19180 MOUNT ELLIOTT AVENUE
DETROIT 34, MICHIGAN • TWinbrook 3-9802

North Shore Health Resort

on the shores of Lake Michigan

WINNETKA, ILLINOIS

NERVOUS and MENTAL DISORDERS
ALCOHOLISM and DRUG ADDICTION

Modern Methods of Treatment

MODERATE RATES

Established 1901
Licensed by State of Illinois

Fully Approved by the
American College of Surgeons

SAMUEL LIEBMAN, M.S., M.D.
Medical Director

225 Sheridan Road

WInnetka 6-0221

THE SANBORN *Viso* CARDIETTE

DIRECT WRITER

THE SANBORN *Metabulator*

MODERN METABOLISM TESTER

These Sanborn Instruments make an outstanding diagnostic team . . . combining beauty of appearance and simplicity of operation with the reliability and accuracy that modern diagnosis demands. Both are backed by 34 years of precision instrument design and manufacture, and both are Accepted by the A. M. A. Council on Physical Medicine and Rehabilitation.

SALES AND SERVICE

SANBORN COMPANY *Branch Office*
1408 David Broderick Tower, Detroit 26, Mich.
Phone Woodward 3-1283

¶ *All important laboratory examinations; including—*

Tissue Diagnosis

The Wassermann and Kahn Tests

Blood Chemistry

Bacteriology and Clinical Pathology

Basal Metabolism

Aschheim-Zondek Pregnancy Test

Intravenous Therapy with rest rooms for Patients

Electrocardiograms

Central Laboratory

Oliver W. Lohr, M.D., Director

537 Millard St.
Saginaw

Phone, Dial 2-4100—2-4109

The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

Blue Cross-Blue Shield Commission, Chicago, recently announced the appointment of J. Walter Thompson Company of Chicago as advertising counsel. These two Commissions co-ordinate the activities of the eighty-one Blue Cross and the seventy Blue Shield plans located throughout the United States.

* * *

Mrs. Robert S. Breakey, Lansing, President of the Woman's Auxiliary to the Michigan State Medical Society during the past year, was featured as "Personality of the Week" in the August 17 *State Journal,* Lansing, Michigan. The eulogistic article was entitled "Local, National Improvements Are Her Aims." A subtitle stated "Mrs. Breakey will really work if she believes the cause is just."

Congratulations, President Breakey, on a well-deserved orchid from your home-town newspaper!

* * *

The Psychiatry and Neurology Division of the Veterans Administration is providing a four-months in-service training course in psychiatry and neurology for physicians who are interested in this field and in employment by the Veterans Administration. These courses start January 15, 1953.

Vacancies exist throughout the country and there are many opportunities for advancement.

For full information, those interested should address the Manager of the Veterans Administration Hospital, Fort Custer, Michigan, or the Veterans Administration Central Office, Washington 25, D.C., Attention, Psychiatry and Neurology Division.

* * *

Louis K. Diamond, M.D., of Boston, addressed the Flint Academy of Internal Medicine on October 7 in Flint. His subject was: "Natural History and Management of Purpura Hemorrhagica." John Parks, M.D., of Washington, D. C., also spoke to the Flint Academy on "Ovarian Tumors."

* * *

The fourth annual Michigan Industrial Health Day is scheduled for Tuesday, March 10, 1953, in the Sheraton-Cadillac Hotel, Detroit.

All members of the Michigan State Medical Society are cordially invited to attend and hear an interesting program devoted to subjects of industrial medicine and surgery.

E. A. Irvin, M.D., President of the national Industrial Medicine Association, will be honored at a banquet in the Sheraton-Cadillac Hotel which will follow the day's clinic, sponsored jointly by the Michigan Industrial Medicine Association and the Michigan State Medical Society.

T. I. Boileau, M.D., of Detroit, is President and Edwin De Jongh, M.D., of Detroit, is Secretary of the Michigan Industrial Medicine Association. For program, write Dr. Edwin DeJongh, 12400 W. Outer Drive, Detroit, Michigan.

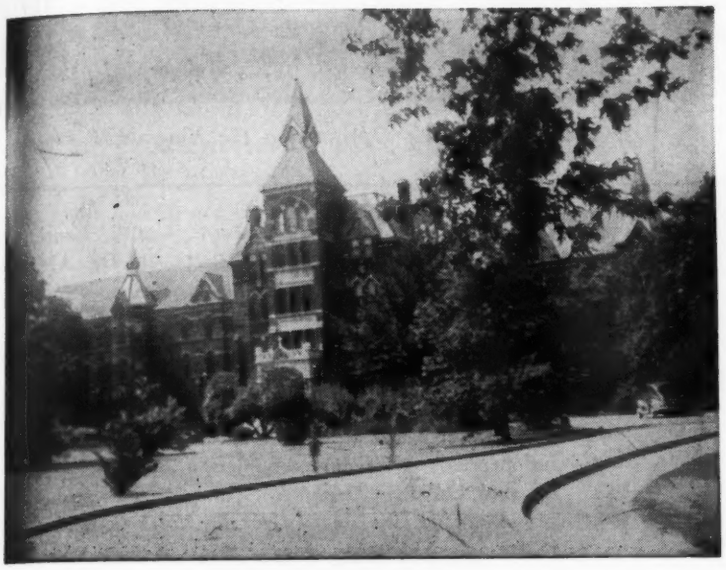
The Industrial Health Day will immediately precede the 1953 Michigan Clinical Institute (scheduled for March 11-12-13.)

* * *

The Texas Medical Association dedicated its new

• Licensed by State of Michigan, Dept. of Mental Health • Registered by American Medical Association

ST. JOSEPH'S RETREAT



Founded in 1860

•

Under direction of
Daughters of Charity
of St. Vincent de Paul

Newly reorganized and modernized for individualized care and treatment of the nervous and mentally ill and alcoholics.

Martin H. Hoffmann, M. D.
Medical Superintendent

23200 Michigan
DEARBORN • near Detroit
LOgan 1-1400

Memorial Library Building, located at 1801 Lamar Boulevard, Austin, Texas, on September 21.

Congratulations, physicians of Texas!

* * *

The Toledo Academy of Medicine moved into its new T.A.M. office and library building, located at 3103 Collingwood Avenue, Toledo, on September 19. The formal dedication ceremony was attended by many notables, with the chief address being given by the President-elect of the American Medical Association, E. J. McCormick, M.D., Toledo.

Congratulations, physicians of Toledo, Ohio!

* * *

The 1952 Michigan Welfare League Conference will be held at the Fort Shelby Hotel, Detroit, Monday-Tuesday-Wednesday, November 10-11-12, 1952. The theme for this year's Conference will be "Human Values in Democracy."

* * *

M. H. Hoffmann, M.D., Detroit, was awarded the honorary degree of Doctor of Laws by his alma mater, Loras College of Dubuque, Iowa, at its summer convocation, August 1, 1952.

Congratulations, twice-Doctor Hoffmann!

* * *

Urology Award.—The American Urological Association offers an annual award of $1000.00 (first prize of $500.00, second prize $300.00 and third prize $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel Jefferson, St. Louis, Missouri, May 11-14, 1953.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before January 15, 1953.

* * *

Cost of Living—Cost of Medical Care.—During the last decade the cost of living went up 69 per cent. The total hospital bills went up 67 per cent. Many of these, of course, depend upon the cost of food and wages. The cost of prescriptions only went up 37 per cent and cost of doctors' fees only went up 38 per cent. These figures are from the Department of Labor.

In ten years the cost of medical care has not risen nearly as much as the cost of living:

Cost of living	Up 69%
Hospital bills	Up 67%
Cost of prescriptions	Up 37%
Doctor's bills	Up 38%

—*Michigan Health Council Bulletin*, August, 1952.

* * *

The Veterans Administration is instituting a four-month intensive training course in psychiatry and neurology to fit the needs of physicians without such pre-

Plainwell Sanitarium

PLAINWELL, MICHIGAN

Member American Hospital Association

EDWIN M. WILLIAMSON, M.D.
Psychiatrist-in-Chief

Professional care for the nervous and mentally ill.

Telephone 2841

Restful Six-acre Estate Overlooking the Kalamazoo River.

vious training who are assigned to duty in 22 predominantly psychiatric hospitals. Physicians who have been engaged in general practice may request this training upon applying for a position at one of these hospitals.

The course will be held at the VA Hospitals in Coatesville, Pennsylvania; Palo Alto, California; and at Downey-Hines, Illinois, near Chicago. Physicians will be employed at salaries commensurate with their training and experience (salary range: $5,500 to $11,800 per annum) and assigned to the course with travel and per diem for the four-month period.

Information and applications may be obtained from your nearest VA Hospital or Regional Office, or by writing to the Chief Medical Director, Veterans Administration Central Office, Washington 25, D. C.

* * *

What a Joke!—A pamphlet entitled "Platform for You and Your Family" came across my desk recently.

It was published by the Public Affairs Institute, 312 Pennsylvania Avenue S.E., Washington, D. C., which calls itself "a nonpartisan, nonprofit research and educational organization." Yet the one-sided health section in the pamphlet was prepared by the Committee for the Nation's Health, which has been fighting in behalf of socialized medicine for years.

An introductory page in the pamphlet, written by Dewey Anderson, the executive director, states that the Public Affairs Institute "does not participate in political action nor suggest partisan solutions of problems of child welfare, education, health, housing and social security."—GEORGE F. LULL, M.D., AMA Secretary and General Manager.

* * *

The average doctor of medicine last year earned $12,518.00, or $980 more than in 1950, according to the Office of Business Economics of the Department of Commerce, based on a mail survey. As in the past, the independent physician did better ($13,378) than his salaried colleague ($9,522). Of an estimated 750,000 physicians in the United States, 38,500 hold salaried positions.—*Newsweek*, August 4, 1952.

It is estimated that Michigan has 16,500 active cases of tuberculosis. Of these, 10,300 are known to health departments and 6,200 are unknown. Of the known cases, 4,740 are under supervision in homes or diagnosed active but not checked within the past year.

These are estimates derived by applying national estimates to Michigan's population.

Michigan has 5,566 cases hospitalized, including tuberculosis cases in mental and penal institutions. There were 6,144 new cases reported in 1951, about two thirds of them active.

These are actual records. But neither of these figures is the full measure of tuberculosis cases requiring isolation and treatment.

MICHIGAN TUBERCULOSIS ASSOCIATION

The Mary Pogue School

Complete facilities for training Retarded and Epileptic children educationally and socially. Pupils per teacher strictly limited. Excellent educational, physical and occupational therapy programs.

Recreational facilities include riding, group games, selected movies under competent supervision of skilled personnel.

Catalogue on request.

G. H. Marquardt, M.D. Medical Director — **Barclay J. MacGregor** Registrar

26 GENEVA ROAD, WHEATON, ILL.
(Near Chicago)

A STEP FORWARD IN HAY FEVER THERAPY

ALMEHIST offers a three way attack against hay fever and nonseasonal allergies. ALMEHIST contains a potent, well tolerated antihistamine of low toxicity plus alkaloids that inhibit glandular secretions of the nose, pharynx and bronchi. d-Amphetamine sulfate is added into the ALMEHIST formula to offset the sedative side effects that occur in susceptible patients.

EACH CAPSULE CONTAINS:

Pyrilamine Maleate 50 mg.
Hyoscine HBr .016 mg.
Hyoscyamine HBr 0.08 mg.
d-Amphetamine Sulfate 1.5 mg.

ALMEHIST
MEYER CHEMICAL CO.
Detroit 24, Michigan

CHARACTERISTICS OF A SUCCESSFUL ADMINISTRATOR

A successful "administrator" must delegate work. To whom do you delegate work? whom do you promote? whom do you support for promotion? Such a person must show **emphatic evidence of a capacity to:**

1. **Laugh at one's self.** (Important.) See how funny you are and accept it. Those that can't laugh at themselves laugh at other people.
2. **To live in the present.** Look out for those that keep talking about the good old days. Usually they don't know what's going on now. So much going on now there is no time for the past.
3. **To demonstrate a chronic propensity to give more than he takes.** Put more in than you expect to get out. It must be chronic, not just some temporary thing to take care of a particular situation.
4. **Suffer a present frustration in order to accomplish a larger future goal.**
5. **Never make the same error twice.** This seems innocuous. However, it implies that the individual recognizes the error—must see it himself—and admits it. It's necessary to admit errors when made in order to prevent repetition.
6. **To direct antagonism toward suitable targets.**
   (a) Poverty
   (b) Mosquitoes
   (c) Golf balls
   (d) Et cetera

Need to direct antagonism where it will do no harm. Humans are very fragile persons. Words hurt. Most people have to learn to control antagonism.

PROF. CHARLES GRAGG, Harvard University

* * *

E. J. Brunette was named Convention Manager of Grand Rapids as of September 1. He succeeds Frank H. Whitwam who is ill.

Mr. Brunette was a long-time Assistant Manager of the Pantlind Hotel in Grand Rapids.

* * *

Physician needed at local federal agency.—A qualified doctor of medicine interested in a newly established position is urgently needed to provide part-time medical assistance for employes at a local federal agency, it was announced recently by Lieutenant Colonel Thomas A. Rice, Public Information Officer for Army Ordnance in Detroit. Working conditions can be arranged so as not to interfere with the existing medical practice of accepted applicant.

Mail inquiries may be addressed to the Public Information Office, Army Ordnance, 574 East Woodbridge, Detroit 31, Michigan.

* * *

Trauma Meeting.—On Wednesday, November 12, 1952, the Michigan Regional Committee on Trauma of the American College of Surgeons is presenting the First Annual Symposium on Trauma under the auspices of the College of Medicine of Wayne University. There will be twenty-two illustrated ten-minute talks on a wide

Cook County Graduate School of Medicine

ANNOUNCES CONTINUOUS COURSES

SURGERY—Intensive Course in Surgical Technic, two weeks, starting October 6, October 20, November 3.
Surgical Technic, Surgical Anatomy and Clinical Surgery, four weeks, starting October 20.
Surgical Anatomy and Clinical Surgery, two weeks, starting November 3.
Surgery of Colon and Rectum, one week, starting October 20, November 17.
Gallbladder Surgery, ten hours, starting October 20.
Bronchoscopy, one week, by appointment.
General Surgery, one week, starting October 6.
General Surgery, two weeks, starting October 6.
Breast and Thyroid Surgery, one week, starting October 6.
Esophageal Surgery, one week, starting October 13.
Thoracic Surgery, one week, starting October 20.
Fractures and Traumatic Surgery, two weeks, starting October 6.
GYNECOLOGY—Intensive Course, two weeks, starting October 20.
Vaginal Approach to Pelvic Surgery, one week, starting November 3.
OBSTETRICS—Intensive Course, two weeks, starting September 29, November 3.
MEDICINE—Intensive General Course, two weeks, starting October 13.
Gastroenterology, two weeks, starting October 27.
Gastroscopy and Gastroenterology, two weeks, starting November 3.
CYSTOSCOPY—Ten-day Practical Course starting every two weeks.
DERMATOLOGY—Intensive Course, two weeks, starting October 13.

TEACHING FACULTY—ATTENDING STAFF OF COOK COUNTY HOSPITAL

ADDRESS: REGISTRAR, 707 South Wood Street, Chicago 12, Illinois

THE MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

PROFESSIONAL PROTECTION EXCLUSIVELY SINCE 1899

specialized service assures *"know-how"*

DETROIT Office:
George A. Triplett, and
Richard K. Wind, Representatives.
704-A Medical Arts Bldg.
13710-14 Woodward Ave.
Telephone Townsend 8-7980

variety of subjects given by a faculty drawn from eleven departments of the College of Medicine and the profession at large. Provision has been made during a morning and afternoon intermission for actual demonstration of the surgical care of patients on the wards of Receiving Hospital. In these demonstrations, the speakers will be assisted by the surgical staff and residents of the Department of Surgery. A buffet luncheon will be served in the Auditorium through the courtesy of the Chrysler Corporation.

PROGRAM

Morning Session—9:00 A.M.

1—"The Problem of the Severed Tendon,"
JOSEPH L. POSCH, M.D., Detroit
2—"Fractures of the Shaft of the Tibia,"
A. JACKSON DAY, M.D., Detroit
3—"Principles of Treatment of Wounds of the Face,"
J. HARDEE BETHEA, M.D., Detroit
4—"Principles of Wound Healing in Trauma,"
CHARLES G. JOHNSTON, M.D., Detroit

WARD WALK—Receiving Hospital—10:00 A.M.

Morning Session—11:00 A.M.

1—"Control of Bleeding and Treatment of Shock,"
ALFRED M. LARGE, M.D., Detroit
2—"Important Anatomical Considerations in Trauma,"
ERNEST D. GARDNER, M.D., Detroit
3—"Fracture of the Ribs,"
PAUL V. O'ROURKE, M.D., Detroit
4—"Treatment of Fractures of the Forearm, Practical Aspects,"
ANGUS G. GOETZ, M.D., Detroit
5—"Basic Principles of Vascular Surgery,"
EUGENE A. OSIUS, M.D., Detroit

Buffet Luncheon—12:00-1:30 P.M.

Afternoon Session—1:30 P.M.

1—"Bacteriology in the Surgery of Trauma,"
CLYDE S. RIGHTS, M.D., New Haven, Conn.
2—"Thoraco-Abdominal Wounds,"
WILLIAM M. TUTTLE, M.D., Detroit
3—"Penetrating Wounds of the Adomen,"
LAWRENCE FALLIS, M.D., Detroit
4—"Principles of the Treatment of Skull Fractures,"
E. S. GURDJIAN, M.D., Detroit
5—"The Open Method for Treatment of Burns,"
MERLE M. MUSSELMAN, M.D.
6—"Fractures of the Surgical Neck of the Femur,"
HERBERT E. PEDERSEN, M.D.

WARD WALK—Receiving Hospital—2:30 P.M.

Afternoon Session—3:00 P.M.

1—"The Hazards of Blood Transfusion,"
CHAS. G. JENNINGS, M.D., Detroit
2—"Neurological Aspects of Injury to the Spinal Column,"
JOHN E. WEBSTER, M.D., Detroit
3—"Nutrition of the Post-operative Patient,"
GAYLORD S. BATES, M.D., Detroit
4—"Transportation of the Injured,"
HAROLD W. WOUGHTER, M.D., Detroit
5—"Trauma to the Eye,"
ALBERT D. RUEDEMANN, M.D., Detroit
6—"Fracture of the Tibial Plateau,"
C. LESLIE MITCHELL, M.D., Detroit
7—"Injuries to the Kidney and Bladder,"
CARLISLE F. SCHROEDER, M.D., Detroit
8—"The Care of Injuries to the Rectum,"
DON W. MCLEAN, M.D., Detroit

EISENHOWER OPPOSES SOCIALIZED MEDICINE

Dwight D. Eisenhower spoke out emphatically against "socialized medicine" Sunday as leading toward "assembly line treatment" of patients.

The Republican presidential nominee said the American people received the world's best medical care now. He cautioned against "any foolish experiment" that would "nullify what our present system already achieved."

In a statement issued shortly before starting on his campaign tour, Eisenhower said:

"Any move toward socialized medicine is sure to have one result: instead of the patient getting more and better medical care for less, he will get less and poorer medical care for more."

The General declared a patient under Federally operated medical care would suffer as a taxpayer, too, "because it would require a whole new army of Government clerks to handle the records that would be an essential part of a compulsory system."

Eisenhower said he recognized that local, state and Federal Government had a responsibility "to assist the unfortunate, but it must not be in ways that will lessen or weaken the benefit already available to the vast majority."

"I am opposed," he said, "to a Federally operated and controlled system of medical care which is what the Administration's compulsory health insurance scheme is, in fact."

Eisenshower said the progress of American medicine has been no accident.

He said "it was achieved because doctors and scientists had their hearts in their work, doing what they wanted to do and not what they were compelled to do."

But the General said the effect of compulsory methods on patients was "still more important." He declared:

"The patient may fear—and no doubt correctly in many cases—that he would receive regimented, assembly line treatment instead of care that is tailored to his individual needs."—*Detroit Free Press,* September 15, 1952.

HOXSEY RULING STRENGTHENS FEDERAL PROSECUTION AUTHORITY, FDA SAYS

A U. S. Court of Appeals decision in the Hoxsey Clinic of Texas case has greatly strengthened the hand of the government in its fight against worthless cancer remedies, according to Food and Drug Commissioner Charles W. Crawford. The decision was handed down at New Orleans, reversing a District Court ruling.

Of importance in future federal actions, according to FDA, is the Appeals Court's decision that testimony of lay witnesses that they had cancer, or were cured of cancer, has no value in the eyes of the court.

The lower trial court judge had refused to issue an injunction against the Hoxsey Clinic. After reviewing the testimony of the fifty medical witnesses and cancer experts who testified for the government, and the twenty-five defense witnesses, the Appeals court ordered an injunction against Harry M. Hoxsey and the Hoxsey Cancer Clinic (Dallas), prohibiting shipment of their products across state lines to cancer patients.

Say you saw it in the Journal of the Michigan State Medical Society

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE UNIPOLAR ELECTROCARDIOGRAM. A Clinical Interpretation. By Joseph M. Barker, M.D., F.A.C.P., Cardiologist, Yater Clinic; Associate Professor of Clinical Medicine and Special Lecturer in Physiology, Georgetown University School of Medicine; Director of the Heart Station and Visiting Physician, Georgetown University Hospital; Chief of Cardiology, Providence Hospital; Visiting Physician, Gallinger Municipal Hospital; Consulting Cardiologist, Arlington Hospital, Arlington, Virginia. Assisted by Joseph J. Wallace, M.D., F.A.C.P.; Advised by Wallace M. Yater, M.D., F.A.C.P. Foreword by Frank N. Wilson, M.D., F.A.C.P. New York: Appleton-Century-Crofts, Inc., 1952.

As Dr. Wilson has so aptly stated in his foreword; "There are a great number of electrocardiographic books ranging in scope from the briefest introduction to the PQRST's of the subject to treatises in the "Handbuch" class. There is a vast and mostly indigestible periodical literature. All of these are of value."

One, therefore, is pleased to have access to a new comprehensive, yet simple, book dealing with the unipolar electrocardiogram. The author has maintained simplicity by translating mathematical formulae and terminology into prose form and by the use of detailed descriptions. These latter are of such length as not to be boresome. Numerous original line drawings supplement the text, and although unipolar electrocardiography deals primarily with considerations of the ventricular complex, a section on the cardiac arrhythmias is included.

Almost all of the material is from personal observation on patients of the Yater Clinic and Georgetown University Hospital. Among the original observations the following seem worthy of note: indications for the exercise test in the diagnosis of angina pectoris; indications for leads from higher levels upon the precordium in high antero-lateral infarction; demonstration of diffuse intraventricular block and criteria for diagnosis; more precise criteria for the diagnosis of right ventricular hypertrophy complicated by complete and incomplete right bundle branch block, and the relationship between the transitional zone of the precordial electrocardiogram and cardiac position in left ventricular hypertrophy.

The format of this book is very good. Parts to be emphasized are in heavier print and the illustrations, drawings and tables are excellently presented. The author is to be congratulated on producing such a fine book. It achieves its primary purpose of furnishing guidance in unipolar electrocardiography to students and physicians.

G.W.S.

COWDRY'S PROBLEMS OF AGEING BIOLOGICAL AND MEDICAL ASPECTS. Third Edition edited by Albert I. Lansing, Ph.D. Washington University, St. Louis. Baltimore: The Williams & Wilkins Co., 1952. Price $15.00.

This third edition of a widely known book covers what has transpired in gerontology since 1942 and reports the opinions of a group of gerontologists as to significant trends and profitable areas for further work on ageing. Lansing's forty-eight contributors thoroughly cover both normal and pathological aspects of ageing. Throughout the book there is expressed a need for clarification of the relation between degenerative disease and ageing. Some say that the process of ageing begins with the fetus; others have designated almost every age from thirty-five on as the start of the "declining years." To most physicians, the calendar year at which the "ageing problems" becomes important is not the chief problem. The problem is the need to distinguish between, on the one hand, the changes that are natural and only to be expected in the ageing body and on the other hand, the chronic and degenerative conditions that appear most frequently in the later years of life.

In this most excellent treatise on these problems, some chapters discuss the body from the biological and cellular angle, some treat of specific clinical or organic problems, and still others consider the social and economic adjustment of older people. Each chapter is actually a monograph on the specific subject. It treats and hence makes for easier and more interesting reading for the busy practitioner. The continuity is good, however, and each chapter presents information that is vital to every

PM says:

"WHY TAKE CHANCES"

No practice is too small—no group too large to benefit from PM's management experience.

WRITE OR CALL FOR INFORMATION

PM • PROFESSIONAL • MANAGEMENT

Security Bank Building — Battle Creek
SAGINAW — GRAND RAPIDS
DETROIT
Affiliated Offices in Other Cities

A COMPLETE BUSINESS SERVICE FOR THE MEDICAL PROFESSION

Vernor's

GINGER ALE

Developed by Michigan's First Registered Pharmacist

•

Recommended by Eminent Michigan Physicians

•

FLAVOR MELLOWED 4 YEARS IN WOOD

•

A PREFERRED BEVERAGE FOR HOME AND HOSPITAL

physician in practice today—since the average age of his patients will continue to reflect the fact that ours is an ageing population.

The science of gerontology is a relatively new science and there remains so much to be done in research and study of the subject, that when such an excellent progress report of what has been done and when such thought provoking material is presented as is contained in this book of Lansing, and his co-authors, the reviewer most earnestly congratulates them and sincerely recommends this book to each and every practitioner of Medicine. It will enable him to find all the facts needed in order to instruct his older patients in a health-conserving regimen, to recognize their characteristic diseases, and to add not merely years to their lives but life to their years.

G.W.S.

A Russian wolf-hound came over to this country and met an American dog.

"How are things in Russia?" asked the U. S. pooch.

"Oh, fine, fine," said the Soviet dog. "We have fine dog houses and all the red meat we can eat."

"Then what are you doing over here?"

"Hell," said the Red dog, "a fellow likes to bark once in a while!"

SAMMOND PLEASANT LODGE

Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

"Home away from Home"

Approved by the American Medical Association and Michigan State Department of Social Welfare—Highly recommended by members of the Medical Profession who have had patients at the Lodge.

For further information write to:

SAMMOND PLEASANT LODGE

124 West Gates Street

Romeo, Michigan

Classified Advertising

$2.50 per insertion of fifty words or less, with an additional five cents per word in excess of fifty

ATTENTION: Draft-exempt physician Michigan license: partner wanted immediately. Surgical preceptorship with potentially unlimited privileges in own 100-bed Detroit Hospital. Retirement anticipated. Optionally may purchase home-office with part of earning. $15,000 minimum take-home the first year. Contact: WEbster 3-1395, 13503 Northlawn, Detroit 4, Michigan.

FOR SALE: Poser Slit Lamp, Bausch & Lomb Binocular Ophthalmoscope, Hildreth Mercury Lamp. All of these items are approximately one year old and in excellent condition. Contact: Larkins Optical Company, 1008 Kales Bldg., Detroit, Michigan. Phone: WOodward 5-2680.

WANTED: General practitioner to take over free of charge, practice netting over $1,500 per month. Investment desirable but not necessary. New hospital in town. Must have Michigan license. Reply Box No. 16, 606 Townsend Street, Lansing, Michigan.

For sale—Chrysler Crown Imperial Limousine—1947 Model Special built Invalid Car, including portable invalid wheel chair. Car equipped with air-conditioned heater, 2 radios, front and rear, electric push-button window lifts for doors and chauffeur's partition. Special wide rear doors cut into roof for easy entrance. U. S. Royal Master Special Tires and Safety Tubes. Car in perfect condition. W. E. Ward, 3675 E. Outer Drive, Detroit 34, Michigan. Tel. TW 1-6000.

DIABETES RETINITIS

(Continued from Page 1343)

logic to say the least, so it is logical to believe that those patients who avoid these factors for the greatest portion of each twenty-four hours are the ones who will be freest from active diabetes. Equally as important as the avoidance of glycosuria and hyperglycemia is the insistence upon freedom from obesity.

Rapid progression, however, is not so much a matter of individual variation as it is a matter of failure of control over long periods of each day or night.

The fact that the early retinal aneurysms, as described by Ballantyne, occur in untreated diabetes and may be seen to disappear when diabetes is controlled should be sufficiently encouraging to impress us with the importance and the efficacy of caloric regulation.

Summary

Among the earliest organic changes found in diabetes is the appearance of capillary micro-aneurysms in the perimacular area of the retinae. Vision may remain normal for many years in spite of the existence of aneurysms. Retinal changes in diabetes can be retarded for an indeterminate number of years when treatment conforms to the known experimental and clinical laws which regulate diabetes.

Causes of failures: Considering diabetes as a disease of carbohydrate metabolism rather than a disease of total metabolism. Prescribing insulin for an obviously obese diabetic. Failure to reduce the weight of obese diabetics. The belief that the minimum amount of insulin should be used rather than an adequate amount to control diabetes over the maximum portion of each twenty-four-hour day.—JAMES W. SHERRILL, M.D., in *Bulletin of The Scripps Metabolic Clinic*, October, 1951.

THE WRITING BETWEEN THE LINES

Take a look at your handwriting. The length of your stroke, where you dot your i—these things are not a matter of chance. According to graphanalysts (often called graphologists), the characteristics of your handwriting are products of the law of your personality. As such, they tell a lot about you. No two handwritings are ever alike. They are as individual as fingerprints. In the hands of an expert, handwriting gives a pretty clear picture of the personality which produced it. That's why handwriting analysts like Cleveland's Hazel Hutchison are being called on frequently these days to help industrial personnel and placement men find out more about the people they must fit to jobs. Graphanalysis can reveal important personality traits. Is the individual honest? Is he emotionally stable? Is he intelligent enough to follow instructions on a given job? Can he endure monotony, present on some tasks? How will he react in an emergency? Is he liable to have trouble getting along with other employes? Does he have leadership qualities? These are some of the things you can find out by handwriting analysis. And while it doesn't suggest that you forget about thorough preplacement physical examination, graphanalysis can tell you important facts about an individual's health—particularly those concerned with blood pressure and metabolism. Even more surprising is the graphanalyst's ability to identify tendencies before they become physically apparent. Addiction to drugs and alcohol is evident in handwriting. So are suicidal tendencies. So are incipient brain diseases and paralysis.—From "Graphanalysis: A New Placement Tool?" in *Occupational Hazards*, 14:10 (Aug.) 1952.